

SELLERS
PRACTICAL TREATISE



ON THE
CONSTRUCTION & USE
OF
KNITTING MACHINES

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OF
KNITTING MACHINES

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PREFACE.

IN introducing this book, we have endeavoured to supply a long-felt need among Knitters, of a *thoroughly practical work* on the construction and working of Knitting Machines. Our experience in the sale of the Machines has brought this matter to our notice; and we have compiled, by the aid of a Knitter of large experience, a series of Instructions which will be found to be thoroughly practical and reliable.

These Instructions have been calculated from the work done on our Machines, and will be found equally practicable on any other kind of Machine by the aid of the Instructions given in inches to every garment. The great difficulty hitherto experienced by learners in making a garment will entirely disappear if this work be thoroughly studied. With each table is given the quality and counts of the yarn used, and the tensions required to make an even and durable fabric.

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PRACTICAL HINTS.

WHEN testing yarns for tension, never decide on a tension too tight knit, as the yarn is too much strained to wear well. It will soon begin to break. If the work is too slack it is hard to knit, and does not give satisfaction when finished, and will not wear well. It is not always the fault of the yarn when it does not wear. A nice firm elastic tension will give the most universal satisfaction for wear and beauty of finish. In all possible cases when purchasing yarns ascertain the quality and counts, which after a short experience will aid the operator very much.

We should always recommend the best qualities of yarns, such as super Germans and fingerings, about 4-ply, 14's to 16's for stockings, and 18's and 20's counts for Cardigan work. Scotch fingering is also very suitable, either for hosiery or garments. The best yarns are the cheapest when knit up, as much time is saved in working up, and the extra length per lb. in supers makes the garments fully as cheap, and much more creditable when finished, besides there being much less risk in the breakage of needles, &c., during the operation.

The beauty and style of the garments depend very much on the abilities and good taste of the finisher, as they can be entirely spoilt in the finisher's hands.

Knitted garments may be greatly improved in the finishing by facing and trimming with other materials.

An open-breasted Jersey Suit may be richly improved with a plush sailor collar; plush front centre, ornamented with gold crown or anchor; plush cuffs, and stripe of plush down each side of pants. Cap to match.

Suits trimmed with white serge make up very well. A blend of colours in wools is also very effective: cardinal and white, navy and white, cardinal and navy, &c.

Little Costumes trimmed with laces, furs, or satins make up very well.

Ladies' Jackets may be knitted to suit any fashion, and look well either braided, trimmed with furs or left plain.

Ladies' Combination, faced with Italian cloth, look a better finish, and are more serviceable than the ordinary finish.

Gent's Undervests, Pants, Drawers, and Combination may be finished in the same way for superior finish.

Cardigan Jackets, with a fancy stitch front and velvet collar, command a good sale.

There is no kind of clothing which cannot be made on the Knitting Machine by an experienced Knitter, and very many articles for domestic use; such as antimacassars, window shades, fringes, mats, and shawls, all of which are easily produced.

In fact the Knitting Machine, for domestic purposes, must become a family necessity. Children of either sex could be completely and neatly clothed in knitted goods; all under-garments for heads of families might be made, and the bulk of the outer garments. Thus the Knitting Machine in the family, while educating each member to industry (as it can be worked by either boy or girl) would utilize time that might otherwise be thrown away; it is pleasant work, and cannot fail to be a good and useful Machine in the household.

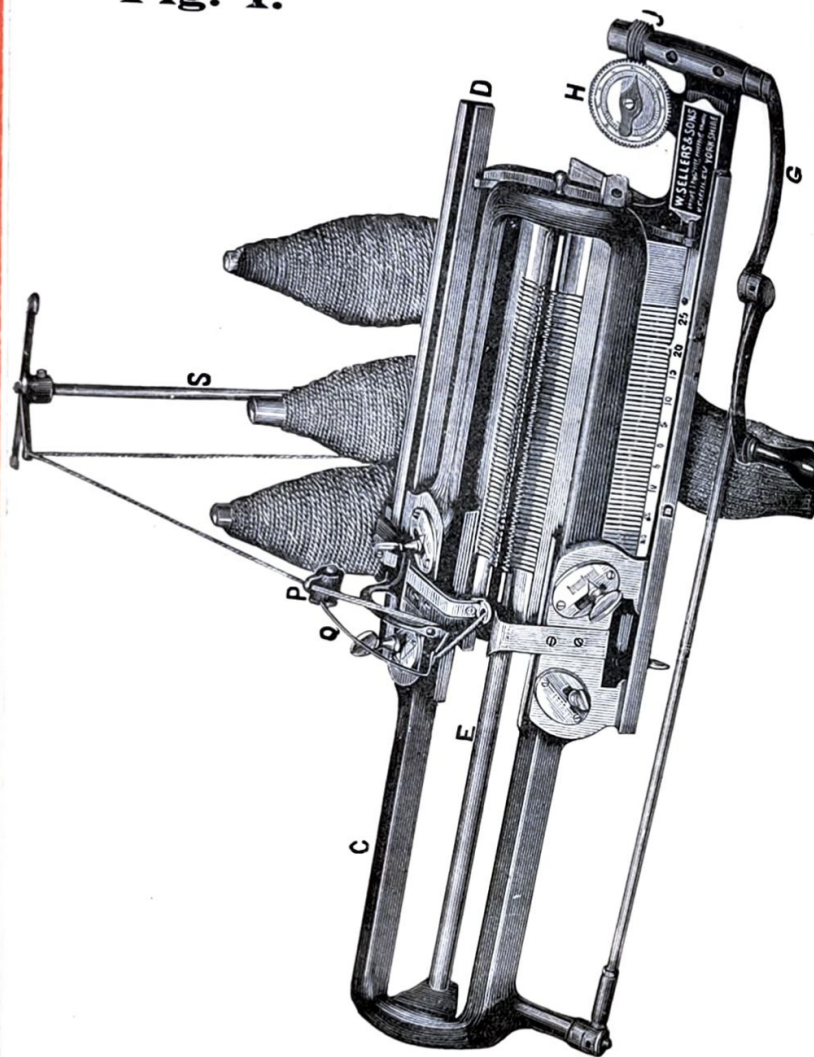
The rapid and increasing demand for knitted goods makes the Knitting Machine a good and safe investment, as a means of livelihood. For instance, one of our Garment Machines, 16" needle room, 7 needles to the inch, would afford employment for three girls, or one boy and two girls; and a very respectable living could be made. As fine knitted goods find ready sale, and command a good price, **any one emigrating** would find the Knitting Machine a profitable investment for any part of the world.

We are now making a Special Machine for the manufacture of football jerseys, gent's drawers, &c., which will produce work at a rapid rate.

Another special feature of the Knitting Machine is, that it can be worked by any person of ordinary capacity, and may be learnt from this book; but a few personal instructions at first would save time.



Fig. 1.



DESCRIPTION OF MACHINE.

Fig. 1 is an illustration of Machine in full work, properly threaded up, with stocking descending. **C** is the carriage; **D**, slides in which the carriage runs; **E** is the standing rod; **G**, crank; **H**, dial or counter; **J**, worm fitted on the end of driving shaft, and works dial for registering the number of rounds made in the work of circular knitting; **P**, eye for yarn; **Q**, take-up wire or tension spring; **S**, bobbin stand.

Fig. 2 shows **A**, needle bed; **KK**, stops for opening and shutting the cams; **BB**, needle gibbs, which are removed to enable the needles to be replaced at will; **L**, lever to drop needle beds; **LL**, handle for racking motion; **M**, bed rest; **N**, base of machine.

Fig. 2.



Fig. 3.

Fig. 3 shows **OO**, tension screws and pointers, which must always be screwed down tight when the machine is in work; **R**, knives or needle latch openers; **T**, yarn guide, which delivers the yarn to the needles.

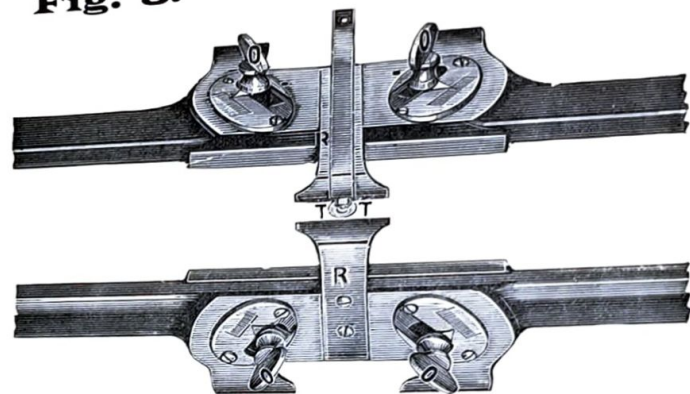


Fig. 4.

Fig. 4 shows position of cams when open, also cam plate, on which the cams slide up and down, and the centre lock; **WW**, are right and left wing cams, which cause the needles to descend, and form the tension of the fabric knitted; **X**, is the **V** or centre cam for raising the needles into work; **U**, is the back lock, which is opened and shut at each end of machine by the stops **KK**, fig. 2; **T**, cam plate.

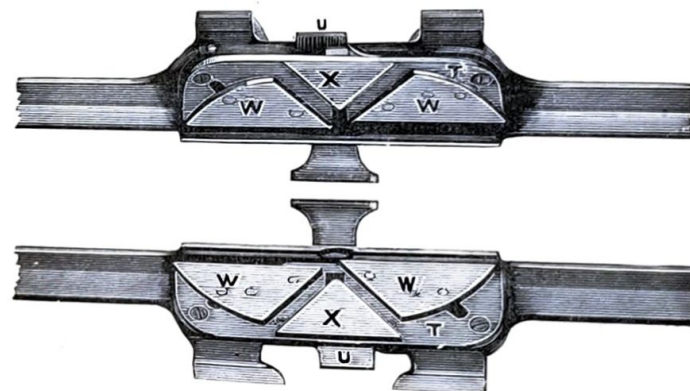


Fig. 5 shows the needles in and out of action, being raised by the **V** or centre cam **X**, and laid by the wing cam **W**.

Fig. 6 is a section of needle bed, showing **A**, needle in work; **B**, needle heel; **C**, hook; **D**, latch; **F**, needle rest or spring.

Fig. 5.

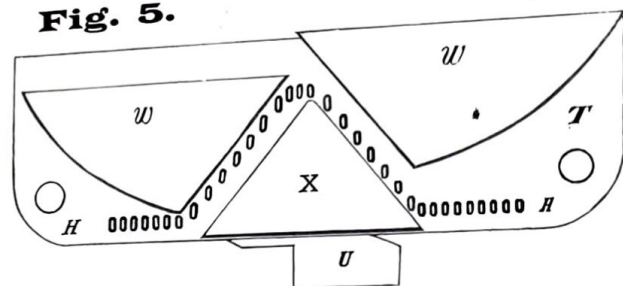
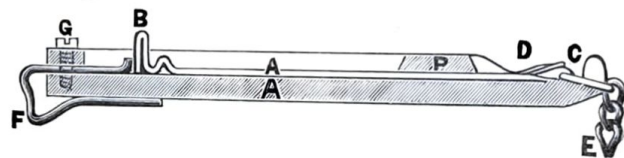
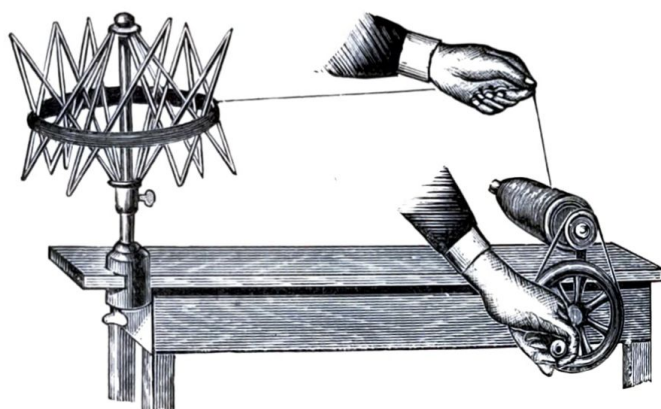


Fig. 6.





How to Wind the Yarn.

HOW TO WIND THE YARN.

It is very essential that the yarn should be evenly and firmly wound on the bobbin. When learning to wind, the operator should turn the winder very slowly, guide the yarn from the swift to the bobbin with the left-hand, and work the winder with the right. Take a piece of knitting in the left hand, sprinkled with oil, and let the yarn pass through it, which will facilitate rapid knitting, and will not injure the yarn, as some dyes—especially black—make the yarn tender; the oil will soften and assist it in forming the loop.

Commence to fill the bobbin at the bottom, moving the left hand steadily forward and backward to fill the bobbin equally, and prevent the coils from slipping forward, which would render the winding unfit for use, and must be wound again.

Uneven winding will cause the yarn to break, and often run the work out of machine.

Instruction I.

PLAIN OR CIRCULAR KNITTING.

Push the number of needles up required by the springs or rests at the bottom of needle bed, having the same number on the front as on the back row.

Set tensions 1 and 2 at the same number, say 11 or 12, according to the counts and thickness of yarn to be knit, and tensions 3 and 4 at 5. Have all the stops out except the right-hand back stop, which must be in. Turn crank round to open all the needle latches, leaving crank at right.

Take the bobbin and place it on the yarn stand at front, bring the yarn up through the hole of front wing, then through the back eyelet of yarn carrier bridge, then through the front eyelet, next through yarn guide and between needle bed, leaving about a yard of wool hanging down which must be fastened under the weight. Turn crank to left and pass the set-up comb up through the loops, insert the wire in the comb and hang on the weights, lift up the thread into the coil of tension spring, push out right-hand back stop and commence to knit.

Instruction II.

RIBBED KNITTING.

The ribbed stitch is acquired by causing the needles to work across each other. To obtain an even and elastic selvedge commence with all the tensions at one number.

In ribs and Cardigan work, half-Cardigan and fancy stitches.

Some knitters prefer to guide the thread by hand, as it gives a more liberal feed and is a good method of detecting

Instruction II. (continued).

knots in the wool and uneven winding, as a slight hold on the bobbin often causes the work to run out of machine, it also facilitates ease in the working of the machine. When this is done the wool must be held very lightly in the hand so that only to gather up the slack at each end of the needles. When a machine is fitted with a limited yarn carrier, the yarn may be thread up as for plain knit. Adjust the yarn carrier stops so that the thread sufficiently clears the needles at each end, and leave the thread out of tension wire. In narrowing, it will be necessary to move the stops up as the needles are drawn down out of work, or the thread lifted up into the tension wire.

All the stops out except right-hand back stop, turn the crank round to ensure all the latches of needles being open, leave crank at right. If the wool is to be guided by hand, only thread the wool through the front eyelet of bobbin stand and down through the wool guide. If tension is to be used, thread up as for plain knit. Turn crank to left, pass comb up through the loops, taking care not to push the loops off the needles. Put in the wire, being careful it does not catch in the needle hooks. Hang on the weights, and fasten end of wool between weights.

Push out right-hand back stop.

Guide the wool by hand and knit to right; before coming to extreme left, push in left-hand front stop and right-hand back stop.

Work the handle over top of machine, and knit required length.



Instruction III.

CARDIGAN STITCH.

Put into work required number of needles, which must be arranged so that the front needle on the left is in advance of the back row, and the back needle on the right in advance of the front row. If the machine racks on the front bed, the racking motion must be arranged so that when the bed is moved it will work to the left; if fitted up to rack on the back bed, it must be arranged to move to the right, the needles will then keep in the position originally arranged, the right-hand back always being in advance of the front row, and the left-hand front always in advance of the back during the racking process, whether racked over 1, 2, or 3 needles. Set tensions 1 and 2 at 12, and tensions 3 and 4 at *F* for plain machine. Set-up as for plain knit, and knit a plain round. Pull in left-hand front stop and right-hand back stop, as for ribs 1 and 1.

Position of stops for Cardigan stitch on machines with split locks same as plain machine.

FRONT TENSIONS.

Plain tension	...	1	at	12	} Tensions screwed tight.
Accessory tension	...	1	at	12	
Plain	"	...	3	at	0
Accessory	"	...	3	at	0

BACK TENSIONS.

Tension	2	at	12	} Tensions screwed tight.
"	4	at	0	

Instruction IV.

ROYAL RIB, on Split-lock Machine.

Plain tension	...	1	at	12	} Tensions screwed tight.
Accessory tension	...	1	at	12	
Plain	"	...	3	at	4
Accessory	"	...	3	at	11

BACK TENSIONS.

Tension	2	at	12	} Tensions screwed tight.
"	4	at	0	

Instruction V.

PLAIN RIBS 1 and 1, on Split-lock Machine.**FRONT TENSIONS.**

Plain tension	...	1	at	0	} Tensions screwed tight.	
"	"	...	3	at		0
Accessory tension		1	at	12		
"	"	3	at	12		

BACK TENSIONS.

Tension	2	at	12	} Tensions screwed tight.
"	4	at	12	

Set the indicators (or steel pointers on which the brass thumb-screw rests) at the desired numbers, then place the small steel rests up to same. Screw these tight, and leave brass thumb-screw loose.

The number of the tension must be determined by the thickness of the yarn. If too tight, lower one number; if too coarse, raise one number. To test this, produce a piece of knitting on a few needles, which will suggest what tension to knit the article at. A fine 3-ply yarn will be found most suitable for these ribs. The needles must be set as for Cardigan.

Instruction VI.

LEICESTER STITCH on Split-lock Machine.

This stitch is used for Cardigan jacket cuffs, fancy borders, Jersey suits, bottoms of boys' trousers, &c.

It makes the web more cloth-like and less elastic, and thus retains its shape, ensuring a flat, firm and even fabric.

Set hands as per Royal Rib stitch, set up as for plain knit, knit a plain round, open right-hand back and left-hand front stops, knit to right and back to left, and rack over one needle. Repeat every time crank is at left.

Instruction VII.

LEICESTER STITCH on plain Machine.

Machine to rack on front bed.

Tension	1 at 9	} Rack when crank is at right, every two rows.
"	...	...	3 at 0
"	...	...	2 at 12
"	...	...	4 at 9

If machine racks on back bed set tensions as follows:

Tension	1 at 12	} Rack when crank is at left, every two rows.
"	...	...	3 at 9
"	...	...	2 at 9
"	...	...	4 at 0

Instruction VIII.

HALF-CARDIGAN STITCH.

Set up as for ribs, knit one plain round, put tensions 1, 2, and 4 at 12, and tension 3 at close.

Push in right-hand back stop.

Push in left-hand front stop.

This fabric will not be quite so thick as Cardigan.

Instruction IX.

HOW TO KNIT A PLAIN STOCKING.

Welt in ribs one and one with a firm elastic selvage.

Push up 46 needles on back row.

" 45 " front "

Always commence to push up needles from the centre of machine, as the needles are numbered from the centre to the right and left.

The end needle at right and left of machine on back row, must project over the two end needles on front row, in order to make a proper selvage to join neatly.

All stops out, except right-hand back stop.

Turn crank once or twice round to open latches of needles, leaving crank at right-hand.

Set tensions 1 and 2 at 15.

" 3 and 4 at 5.

Thread up the machine, as per instruction No. 1 for plain knitting.

Turn crank from right to left. Push out right-hand back stop.

See that all the needles have caught the yarn. If not, hook the yarn on to the empty needles.

Put the set-up comb underneath machine and up through the loops, being careful not to push the yarn off the needles in so doing. Put the wire through the eyelets of the comb, and pull the comb down clear of the needles, then hang on the weights and fasten the wool hanging down between the beds at right-hand underneath the weights.

Instruction IX. (continued).

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Now knit one plain round from left to right, and right to left. But before coming to extreme left, push in left-hand front stop.

Now set tensions 1, 2, and 3, at (say) 10, and pull in right-hand back stop. Turn crank to right, and set tension 4 at same number as 1, 2, and 3.

Knit 30 times across machine, and then run work out.

Take the crank at right of machine, take the right-hand corner of the work as it was in the machine, to bring the selvedge stitch inside of the stocking, and commence to hook in the welt from the centre needle on the back row.

Take each stitch separately and hook on to empty needle, working from left to right and right to left, until all the needles are filled up.

Set tensions 1 and 2 at 15.

„ 3 and 4 at 5.

Have all stops out. Thread up machine for plain knit.

LEG.

Set counter at 100 and knit 100 rounds, and leave crank at right.

NARROWINGS.

Take the narrowing comb with 12 eyelets in, open all the latches of needles at left from centre needle on back row, hook the comb on to the 4th needle from the centre, pull the first 12 needles up until the stitches are below the latches, push needles down again until the stitches are on to the eyelets of the comb, press the comb down at the top to open the latches, and lift the stitches one needle forward, move remaining stitches forward, and pull down empty needle at the end.

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Instruction IX. (continued).

Turn crank to left.

Repeat same operation again at right of machine, lift the end stitch on the front row on to the empty needle at the back, and pull down the empty needle at the front. This operation will occur alternately at each end, as the narrowings proceed, in order to keep the needles equal back and front.

Knit 6 rounds.

Repeat the narrowings 9 times, knitting 6 rounds between each narrowing.

ANKLE.

Knit 45 rounds leaving crank at right.

If the narrowings have been properly done, there will now be 72 needles in work, 36 on back and 36 on front of machine.

HEEL.

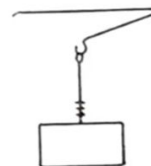
Pull in back and front right-hand stops, and push both centre locks back to right.

Set tensions 1 and 3 at 5.

„ 2 and 4 at 11, one number finer than the leg has been knit. If the heel is to be spliced, knit it one number coarser.

The machine will now knit on the back row only.

Knit four half-rounds, that is, four times across machine, leaving crank at right, drop front bed and put in triangle between the beds, and hang on the weights.



Take the left-hand down under the machine and hold the work firmly at the back to prevent it riding up the needles and being cut by the front knife. Knit 24 half-rounds making 28 half-rounds in all, and leave crank at right.

Instruction IX. (continued).

GUSSET or LITTLE HEEL.

Divide the number of stitches on back row into three parts. Taking one quarter of the number on to one of the short knitting needles, by passing the needle through the loops, then push up the needles until the stitches are below the latches, pull down the needles out of work and let the stitches on knitting needle drop down between the beds.

Turn crank to left and repeat same operation at right.

There will now be 9 stitches on each knitting needle, and 18 on the back row in work.

Take the heel wire and insert it in the centre of work at the back, and hang on the weight, taking out the triangle.



Turn crank to right, take the end stitch on knitting needle and put it on to last needle in work, and withdraw knitting needle. Turn crank over and repeat same operation at right-hand. Turn crank over and continue to put the stitches on the end needle in the same manner, until the knitting needles are empty, when crank will be at left. In knitting the 28 half-rounds of the heel, there will be 14 side loops. Push up the 9 needles on the back row at right-hand taken out of work when dividing the heel, then push up 2 needles more on the back, and 2 on the front row, to bring the needles equal. Pull down the rest of the last needle in work at the ankle of stocking on the front row, the extra 4 stitches made by the side loops must all be narrowed round on to this needle in narrowing the gore. Drop both beds, take the first short stitch in the heel and hook it on to the first empty needle on the back next to the work, fill up all empty needles in rotation until

Instruction IX. (continued).

all the stitches are hooked on, the last stitch being put on to the last needle in work on the front row, the one indicated by the rest being lowered. Push out back and front stops at right-hand. Turn crank over.

Set tensions 1 and 2 at 12, and 3 and 4 at 5.
Now repeat same operation at left of machine.

TO NARROW THE GORE.

Set counter at 100.

Knit three half-rounds, crank at right.

Take the apparatus with two eyelets in and advance the first 2 stitches 1 needle (on to the one indicated by the rest being lowered). Lift the end stitch from the back on to the end needle in front, and withdraw the empty needle at back (this last operation will occur at each end alternately until the 4 extra stitches are narrowed out). Turn crank to left and repeat the narrowings at right-hand, knit three half-rounds between until the narrowings are completed, there will then be 36 needles on the back and 36 needles on the front row in work, and the counter will register 10 rounds. Knit 75 rounds more for the foot, and commence to narrow the toe.

THE TOE.

Crank at right.

Take the apparatus with 3 eyelets in and advance the three end stitches on the back and front row at left one needle, withdraw the empty needle, turn crank over and repeat the same operation at right of machine, turning crank over after each narrowing until 6 stitches remain on each row of needles. Break the yarn about 12 inches from the work.

Push up right-hand front needle until the stitch slips below the latch, place the yarn in the hook of needle and pull the needle down until the loop slips over the latch,

Instruction IX. (continued).

then pull the yarn through loop and draw needle down out of work, thread up remaining stitches in this manner, when the work will leave machine.

Thread a drawing needle with the end of yarn and run it once or twice across the toe, then down the side of narrowings to fasten off the thread, then cut the yarn close to work.

Turn the stocking inside out and take the two edges of welt and put them together.


Thread a darning needle with the setting up thread, and pass it through the two outside small loops of the welt, not drawing it too tight until the welt is sewed up, fasten the thread and cut off close to work.

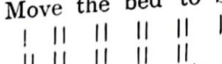
A finish is added by passing a heated flat-iron over the stocking to take out the creases.

**Instruction X.****STOCKINGS in RIBS 2 and 2, and how to Narrow.**

[See Illustration, page 28.]

Man's Size. 4 Ply Super German.

Arrange the needles thus: 

Set all tensions at 9, pull in right-hand back stop, the other 3 stops being out. Move the bed to bring needles opposite each other thus: 

Push up 60 needles each side of machine, arranged as above, turn crank round to open latches of needles, leaving crank at right, thread up machine as for plain knitting. Knit once to left.

Put in set-up comb, and hang on the weights.

Push out right-hand back stop.

Knit once to right.

Push in left-hand front stop.

Knit to left.

Move the bed to bring needles into same position as at first arranged.

The plain round knit will make a firm and even selvedge.

Pull in right-hand back slide.

Knit 160 rows and leave crank at right.

NARROWINGS.


At the left-hand back corner lift the 2nd stitch on to the 3rd needle, and move the 1st stitch one needle forward.

At the front left-hand corner move the 1st and 2nd stitches one needle. Withdraw the empty needles.




Instruction X. (continued).

Turn crank to left and repeat same operation at right-hand, both rows.

The needles will now be thus: 


Knit 5 rows.

Then lift the 2nd stitch from left-hand back row on to 3rd needle at front, and pull down empty needle. Turn crank to left and repeat same operation at right-hand.

Needles will now be thus: 

Knit 5 rows.

Now move 1st stitch on left-hand back row one needle forward, remove empty needle at left-hand front corner, move stitches 1, 2, and 3 one needle forward, and remove empty needle. Repeat same at right.

Needles will now be thus: 

Knit 5 rows.

Now move 1st stitch at left-hand back corner one needle forward, pull down empty needle at left-front corner, move 1st and 2nd stitches one needle, pull down empty needle, turn crank to left and repeat same operation.

The needles will now be in the same position as before commencing to narrow, minus 2 stitches at each corner.

Go through these narrowings three times, which will reduce the number of needles by 24, making 6 stitches less at each corner.

Knit 50 rows for ankle. Crank at right.

Now divide the stitches into three parts, take a piece of yarn of another shade, and knit $\frac{1}{3}$ of the stitches on the front and back row at left of machine on to it, push the needle up, draw the loops over the needle tops, and drop stitches down between beds, turn crank to left and repeat same operation at right-hand corners.

Now knit 70 rows for upper part of foot and run work out.

Set tensions and stops as in heel of plain stocking.

Take the two edges of the stitches thrown off, bring each edge to the centre needle on the back row, being careful the selvedge edges are inside of work.

Hook the stitches thrown off on to back row of needle.

Knit 28 rows for heel, take off the heel as in a plain stocking.

Narrow the gore with the apparatus with 3 eyelets in.

Knit 70 rows on back row of needles, including narrowings of gore for underpart of foot, run work out and seam the ribbed and plain edges together, and straighten both ends.

Then hook the ribbed or upperpart of foot on to front row of needles, and the plain or underpart of foot on to back row of needles.

Narrow toe out as in plain stocking.

This is the best and safest way to finish off the toe, but quicker methods may be adopted by an experienced knitter.

4-fold Scotch fingering yarns in fancy mottles, or self-colours in super German counts, about 4-fold 18's. Knit with tensions at 8 or 9 will make a first-class 2 and 2 ribbed stocking.



CHILD'S SOCK in RIBS 1 and 1.



Push all stops out.

Put all tensions at 8 or 9 according to thickness of yarn.

Raise on front of machine 28 needles.

Raise on back of machine 29 needles.

Push the needles up by the springs or rests to hold the needle in its proper position.

There is one needle more on the back row than on the front. This will cause the two end needles on the back to project over the two end needles at front, and will make a selvedge at both edges, making a more perfect seam up the back when the stocking is joined up.

Crank at left, pull in right-hand back stop.

Turn crank round to open latches of needles.

Thread up machine as for plain knitting, put in the set-up comb and hang on the weights, pull out left-hand front stop, turn crank to left, push out right-hand back stop, turn crank to right, push in left-hand front stop, turn crank to left and push in right-hand back stop. The needles will now

Instruction XI. *(continued).*

cross each other. Knit backwards and forwards over the top of machine 30 times, which makes 30 rounds of ribs 1 and 1.

NARROWINGS FOR LEG.

Narrow at each corner.

Take the apparatus with the three eyelets in and advance the three end stitches one needle both front and back row, withdraw the empty needles, turn crank over and repeat the same operation at left-hand corner. Knit 10 rounds between.

Repeat narrowings 3 times, knitting 10 rows after last narrowing for ankle.

Divide stitches for heel, throwing off one quarter of the stitches at each corner (it is the best way to knit these stitches on to a piece of wool of another shade), drop stitches down between the needle beds, knit 30 rows for upper part of foot, and run work out.

Push all slides in, set tensions 2 and 4 at 11, and tensions 1 and 3 at *F* lower front bed.

Take the two edges of work and put them together, take care that the selvedge edge is turned inside, hook the stitches thrown off on to back row of needles, the two selvedge stitches meeting on the centre needle, knit 18 rows for heel, make the heel as in plain knit. (See instruction 1 for plain stocking). Narrow the instep or gore with the apparatus with three eyelets in, knit 30 times across top of machine for underpart of foot, raise same number of needles on front row as there are on the back, open all the latches and hook on the upper part of foot, set tensions 1 and 2 at 11, set tensions 3 and 4 at 5, push out all slides, knit once round, and commence to narrow toe as in plain knit.

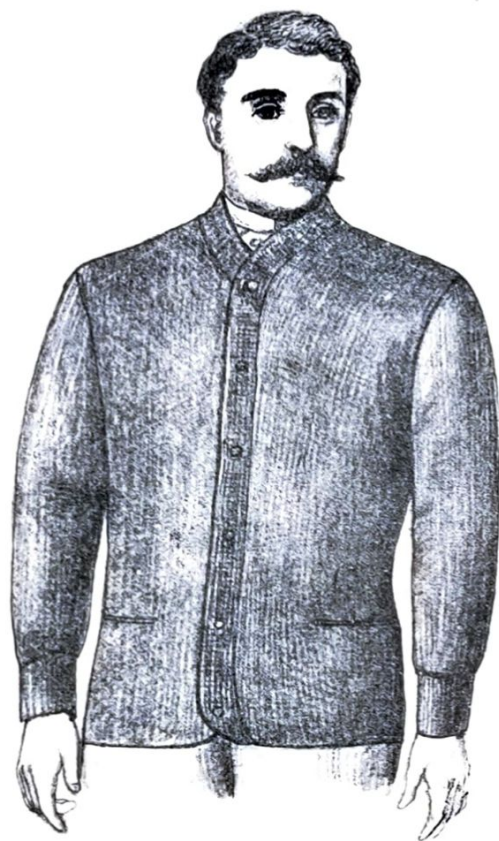
Instruction XI. *(continued).*

This is the quickest way of finishing off a rib stocking, but the instruction given in ribs 2 and 2 is more safe in making a nice finish.

The stocking must be sewn up the back, take it on the wrong side and put the needle through the small loops at each side of the selvedge. Care must be taken not to draw the seaming thread too tight, as it is essential the seam should be very elastic.

A fine German super yarn about 4-fold 20's counts, or 3-fold Scotch fingering, will make a fine sock.





Instruction XII.

Cardigan Jacket.

SMALL MAN'S SIZE.

BACK

Push up 80 needles both sides.

Knit 430 rows for waist.

Narrow 2 stitches out for under arm.

Knit 120 rows for arm-hole.

Narrow down at each corner until 48 stitches remain on each side, knit 6 rows between narrowing, and run work out.

FRONTS

Push up 46 needles each side.

Knit 430 rows for waist.

Narrow 7 times for under arm at left of machine.

Knit 2 rows between narrowings.

Knit 130 rows counting rows knit in narrowing.

Narrow 7 times at right of machine.

Knit 10 rows between. After last narrowing, turn crank to right and raise one needle on left side, then knit 10 rows and raise and narrow twice more, then knit 50 rows and run work out. Use apparatus with two eyelets in to narrow with.

SLEEVES

Push up 76 needles each side.

Knit 10 rows.

Narrow 2 times.

Knit 10 rows between narrowings.

Instruction XII. (continued).

36

Knit 300 rows.
Narrow 4 times.
Knit 30 rows between.
Set tension for Leicester stitch. Narrow with apparatus
with three eyelets in.
Rack for cuff 80 rows.

POCKETS

Push 33 needles each side.
Knit 180 rows.
Knit a plain round, and continue knitting second
pocket, run work out and cut pocket in two across the plain
round.
Extreme length of back 25".
Extreme length of sleeve 21".

Instruction XIII.

ORDINARY MAN'S SIZE.

BACK

Push up 85 needles.
Knit 480 rows for waist.
Narrow 2 stitches out for under arm.
Knit 2 rows between.
Knit 130 rows for arm-hole.
Narrow down to 48 stitches on each side.
Knit 6 rows between narrowing, and run work out.
Use the apparatus with two eyelets in to narrow with.

FRONTS

Push up 48 needles each side.
Knit 480 rows for waist.
Narrow 7 times for under arm at left of machine.
Knit 2 rows between narrowings.

37

Instruction XIII. (continued).

Knit 140 rows for arm-hole, counting the rows in
narrowings.

Narrow 7 times for neck at right of machine.
Knit 10 rows between narrowings.

After last narrowing, turn crank to right and raise
one needle at left side, then knit 10 rows and raise and
narrow twice more, knitting 10 rows between after last
raising. Knit 50 rows, and run work out.

Narrow with apparatus with two eyelets in.

Make two pieces like this, reversing narrowings as in
O.S. men's.

SLEEVES

Push up 80 needles each side.
Knit 10 rows.
Narrow 3 times.
Knit 10 rows between narrowings.
Knit 340 rows.
Narrow 4 times.
Knit 30 rows between narrowings.
Set tensions for Leicester cuff, and use apparatus
with three eyelets in for narrowing.
Rack for cuff 90 rows.

POCKETS

Push up 36 needles each side.
Knit 190 rows.
Knit a plain round, and continue knitting the second
pocket, then run work out of machine and cut in two where
the mark is.
Make trimming for facing as before described.

Extreme length of back 27".

Extreme length of sleeve 23".

Instruction XIV.

OUT-SIZE MEN'S.

Tension 1 and 2 at 12, plain machine.

" 3 and 4 at *F* " "

Plain tension 1 and 2 at 12, split-lock machine.

" " 3 and 4 at *F* " "

Accessory tension 1 at 12 " "

" " 3 at 0 " "

Scotch fingering yarn, about 4-fold, 20's counts.

BACK

Push up 90 needles each side.

Knit 530 rows for waist.

Narrow 2 stitches out at each corner for under arm.

Knit 2 rows between each narrowing.

Knit 130 rows for arm-hole.

Narrow down to 50 stitches on each side at all four corners, 6 rows between narrowings and run work out.

FRONTS

Push up 50 needles each side.

Knit 530 rows for waist.

Narrow out 7 stitches at left side, back and front, for under arm.

Knit 2 rows between narrowings.

Knit 140 rows for arm-hole, counting the rows in narrowing.

Narrow 7 times at right of machine.

Knit 10 rows between narrowings.

After last narrowing, turn crank to right and raise one needle at left side. Then knit 10 rows and raise and narrow twice. Knit 10 rows between, making 9 narrowing and 3 raisings.

Instruction XIV. (continued).

Knit 50 rows after last raising and run work out.

Use the apparatus with two eyelets in to narrow and raise.

Make two pieces like this one for right, and the other for left, simply reversing the narrowings.

SLEEVES

Push up 80 needles each side.

Knit 10 rows.

Narrow 3 times.

Knit 10 rows between narrowings.

Knit 380 rows.

Narrow 4 times.

Knit 30 rows between narrowings.

Set tensions for the Leicester stitch.

Rack for cuff 90 rows.

Use the apparatus with three eyelets in to narrow with.

POCKETS

Push up 36 needles each side.

Knit 190 rows.

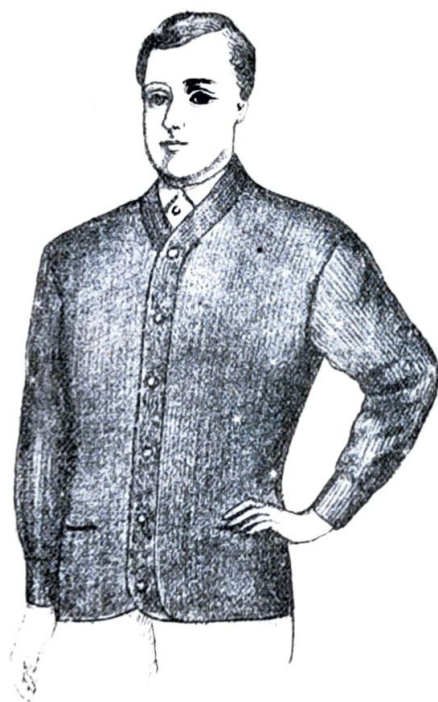
Knit one plain round, and continue knitting second pocket, then run work out and cut pocket in two where the plain round is knit.

Make a racked trimming, or border, for facing front of jacket, which can be knit in lengths the width of machine, or knit a strip the width required in one length. It will take about 6 feet of trimming to face a Cardigan this size.

Extreme length of back 29".

Extreme length of sleeves 24".





Instruction XV.

Cardigan Jacket, FOR YOUTHS.

Knit off 3-fold Scotch fingering. Tensions 1 and 2 at 11.

BACK

Push up 75 needles each side.

Knit 430 rows for waist.

Narrow 3 times for under arm.

Knit 2 rows between narrowings.

Knit 100 rows for arm-hole.

Narrow at each corner down to 32 stitches on each side.

Knit 4 rows between narrowings.

FRONT

Push up 40 needles each side.

Knit 430 rows for waist.

Narrow 5 times for under arm at left of machine, both rows.

Knit 2 rows between narrowings.

Knit 110 rows for arm-hole, counting rows knit in narrowing.

Narrow 6 stitches out at right of machine on both rows.

Knit 10 rows between.

Knit 50 rows, and run work out.

Make 2 pieces, one right and one left. Simply reverse the narrowings. Use the apparatus with two eyelets in to narrow.

Instruction XV. (continued).

SLEEVES

Push up 66 needles each side.
 Knit 310 rows.
 Narrow 5 times at all corners.
 Knit 22 rows between the narrowings.
 Rack for cuff 70 rows Leicester stitch.
 Make trimmings for front a little narrower than for men's Cardigans.

POCKETS

Push up 26 needles.
 Knit 150 rows.
 Make pockets as in men's Cardigans.

Extreme length of back 23".
 Extreme length of sleeve 18".

Instruction XVI.

Cardigan Jacket, FOR BOY ABOUT 12 YEARS OLD.

Knit from 3-fold Scotch fingering. Tensions at 11.

BACK

Push up 75 needles each side.
 Knit 400 rows for waist.
 Knit 100 rows for arm-hole
 Narrow 3 stitches out at each corner for under arm.
 Knit 2 rows between.
 Narrow at each corner down to 32 stitches on each side.
 Knit 4 rows between narrowings and run work out.

Instruction XVI. (continued).

FRONT

Push up 40 needles each side.
 Knit 400 rows for waist.
 Narrow out 5 stitches for under arm to left of machine
 both rows.

Knit 110 rows for arm-hole.
 Narrow 5 times at right of machine for neck.
 Knit 10 rows between narrowings.
 Knit 50 rows and run work out.
 Use apparatus with two eyelets in for narrowing.

SLEEVES

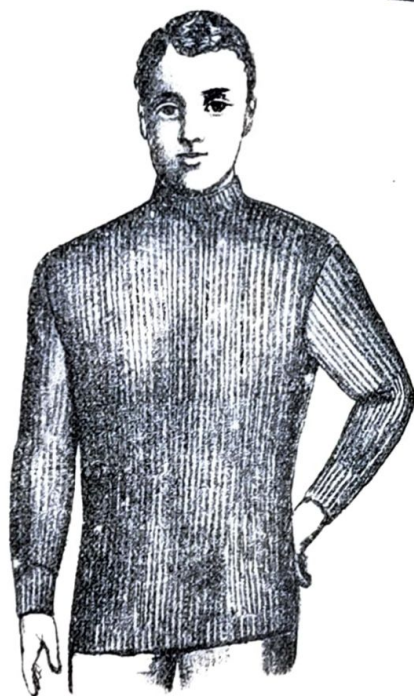
Push up 62 needles each side.
 Knit 290 rows.
 Narrow 5 times.
 Knit 20 rows between narrowings.
 Rack for cuff 70 rows Leicester stitch.

POCKET

Push up 26 needles.
 Knit 150 rows.
 Make pockets as in men's Cardigans.

Extreme length of back 21".
 Extreme length of sleeve 17".





Instruction XVII.
Plain Knit Jersey,
FOR BOY.

Push up 104 needles each side.
Set up work as for plain knit.
Close all stops. Tensions 1 and 2 at 12, 3 and 4 at 5.
Knit 260 rounds and run work out.
It will be an advantage to the finisher to knit a few rounds in ribs or Cardigan at the finish, to keep the end from curling up.

SLEEVES

Push up 40 needles each side.
Set all tensions at 8 or 9.
Open right-hand back stop, leave crank to right.
Set up as for plain knit, bring crank to left.
Close right-hand back stop, turn crank to right.
Push in left-hand front stop, turn crank to left.
Push in right-hand back stop, knit 40 rows and run work out.

Hook work into machine, commencing at left-hand back corner, and put one stitch on to each needle, finishing at left-hand front corner.

Push out all stops, set tensions 1 and 2 at 12, and tensions 3 and 4 at 5, thread up machine as if commencing to knit a stocking, knit 74 rounds.

Raise 5 times at left-hand back and front corners.
Knit 5 rounds between.

Knit 45 rounds and run work out.

Knit with a 4-fold yarn counts about 14's.

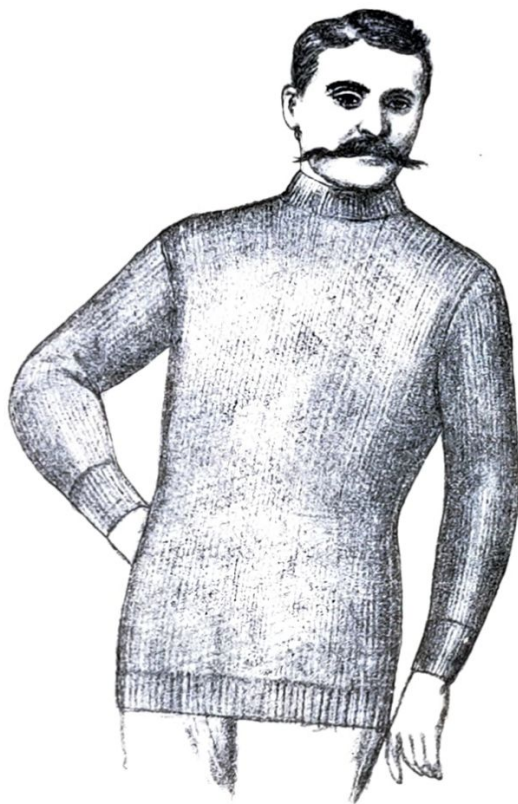
Knit 2 pieces, 1 and 1 rib, to form neck.

Push up 36 needles each side.

Knit 32 rows same tension as cuffs of sleeve.

Length of jersey 18".

Length of sleeve 15".



Instruction XVIII.

Football Jersey.

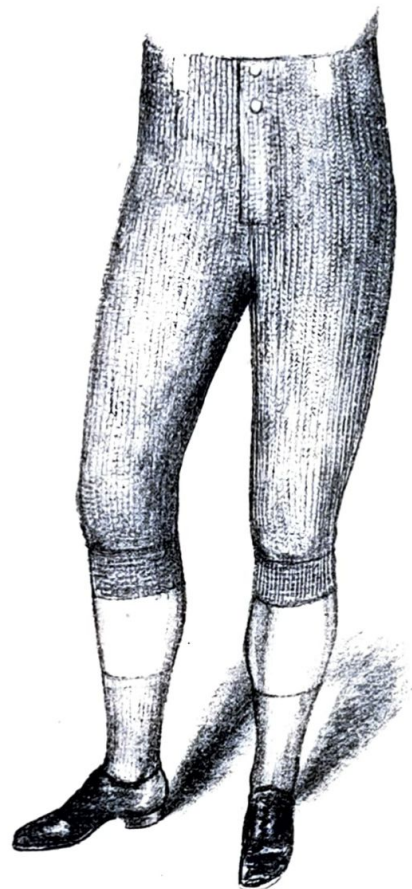
(Large Size.)

Tensions 1 and 2 at 12, 3 and 4 at 5. All stops closed.
Push up 120 needles each side.
Knit 250 rounds.

SLEEVES

Push up 48 needles each side.
Knit 50 rows, ribs 1 and 1, and run work out.
Hook work into machine, commencing at left-hand back corner.
Knit 100 rounds, tensions 1 and 2 at 12, 3 and 4 at *F*.
Raise 12 times at left of machine.
Knit 3 rounds between raisings.
Knit 20 rounds after last raising and run work out.
Use a strong 4-fold yarn, counts about 12's or 14's.
Knit 2 pieces for neck, 40 needles in each piece, 34 rows 1 and 1.

Extreme length of jersey 25".
Extreme length of sleeve 24".



Instruction XIX.

Football Pants.

(Ordinary Men's Sizes.)

Cardigan stitch off 4 ply 20's counts.

Push up 70 needles each side of machine.

Rack 90 rows every two rows, Leicester stitch.

Knit 26 rows plain Cardigan.

Raise 12 times.

Knit 24 rows between raisings.

Knit 70 rows after last raising.

Narrow 12 stitches out on one edge, both rows.

Knit 24 rows between narrowing.

Knit 70 rows after last narrowing, and run work out.

Make two pieces, narrowing one out at right, the other at left of machine.

Make a belt 2" deep 32" long, for top of pant.

Finish them with buttoned front.



Instruction XX.

Gents' Undervest.

(In Plain Knit.)

From Lambswool Yarn, Unshrinkable.

Push up 120 needles each side, set tensions 1 and 2 at 12, 3 and 4 at 5, set up as for plain knit, push out all stops, knit 250 rounds and run work out.

The vent and neck must be shaped out and bound with a nice Italian cloth to match, which adds a superior finish.

Quarter-Sleeves

Push up 50 needles each side.

Knit 50 rows, ribs 1 and 1, and run work out.

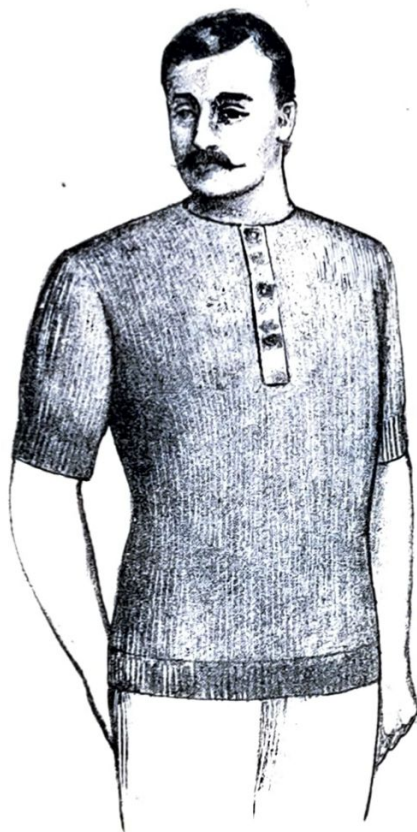
Hook into machine same as a stocking welt, and commence plain knitting. Tensions and stops same as for body.

Knit 3 rounds.

Raise 12 times.

3 rounds between.

Knit 20 rounds after last raising, and run work out.



Instruction XXI.

Gents' Undervest.

(In Ribs 1 and 1.)

Knit from Unshrinkable Lambswool Yarn.

All tensions at 14. Stops open for ribs.

Push up 100 needles) Neck to be cut out and finished
Knit 550 rows) as in plain knit.

Quarter-Sleeves

Push up 90 needles each side.

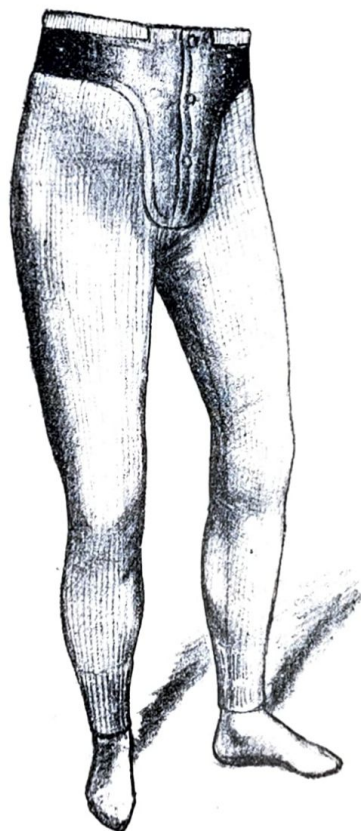
Knit 20 rows.

Narrow 10 times at each corner every time crank is turned over to form gusset.

Knit 10 rows after last narrowing.

On the back row lift the 2nd stitch on to the 3rd needle, 4th stitch on to 5th needle, moving every other stitch to end of work. The needles will then be disposed, every other needle up on back row, front row remaining as before. This arrangement will make ribs 2 and 1 tighten tensions one number.

Knit forty rows, and run work out.



Instruction XXII.

Gents' Large Size Drawers.

(In Ribs 1 and 1.)

Knit from Unshrinkable 3 Ply Lambswol Yarn.

Tension same as Under Vest.

Push up 110 needles each side.

Knit 150 rows.

Narrow 18 times all corners.

Knit 8 rows between narrowings.

Move every alternate stitch on back row for Ribs 2 and 1.

Knit 50 rows and run out. Make two like this.

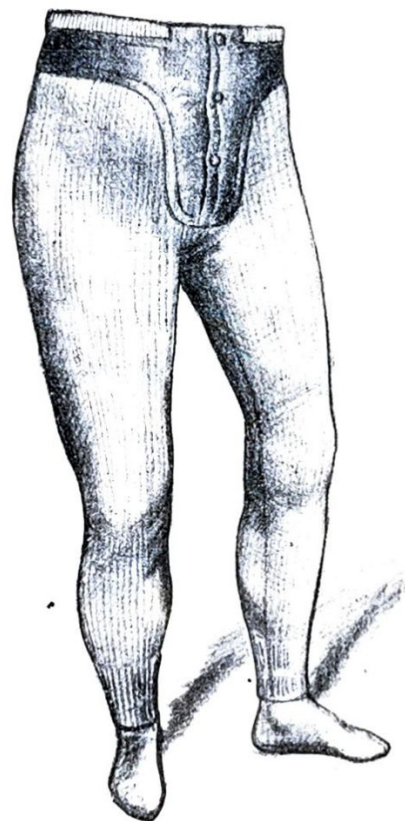
Make a small gusset to insert at fork, which greatly improves the drawers and assists the wear, as it can readily be taken out and a new one inserted.

Push up 35 needles each side.

Knit 50 rows, if not quite square pull a few rows out.

Make a belt in Cardigan stitch for top, as it is much firmer round the body, or face the tops with an Italian cloth or flannel to match.

Push up 18 needles each side, set tensions and stops for Cardigan, knit desired length, about 32".



Instruction XXIII.

Gents' Drawers.

3 Ply Scotch Fingering counts 18's, or fine Merino Yarns.

Set tensions for Ribs 1 and 1, about 9 or 10.

Push up 136 needles each side.

Knit 180 rows for body.

Narrow 30 times at each corner.

Knit 6 rows between.

Knit 20 rows after last narrowing.

Alter back row for ribs 2 and 1, taking out every alternate needle.

Knit 60 rows and run work out.

Make two pieces like this.

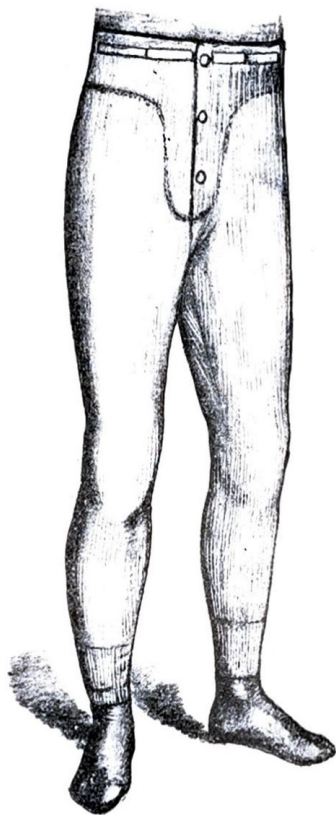
Push up 35 needles on each side for gusset.

Knit 55 rows, ribs 1 and 1.

If intended to be finished with a facing without a belt for top, knit 200 rows in body.

Push up 18 needles for belt, knit 34", tensions at about 11. Set for Cardigan rib.

Where machine is not large enough for required number of needles up at each side, the fabric may be knit in four parts and seamed up each side, being careful only to narrow one edge of each piece. The larger machine saves the most hand labour.



Instruction XXIV.

Gents' Plain Knit Drawers.

Tensions and stops set for plain knit, from 3 or 4 ply Scotch Fingering or fine Merino Yarns.

Push up 60 needles each side, for welts.

Knit 70 rows, ribs 1 and 1 or 2 and 1, and run work out.

Hook welt in machine, commencing at back left-hand corner, leaving it to join at left-hand side.

Commence knitting as in a plain stocking.

Knit 40 rounds.

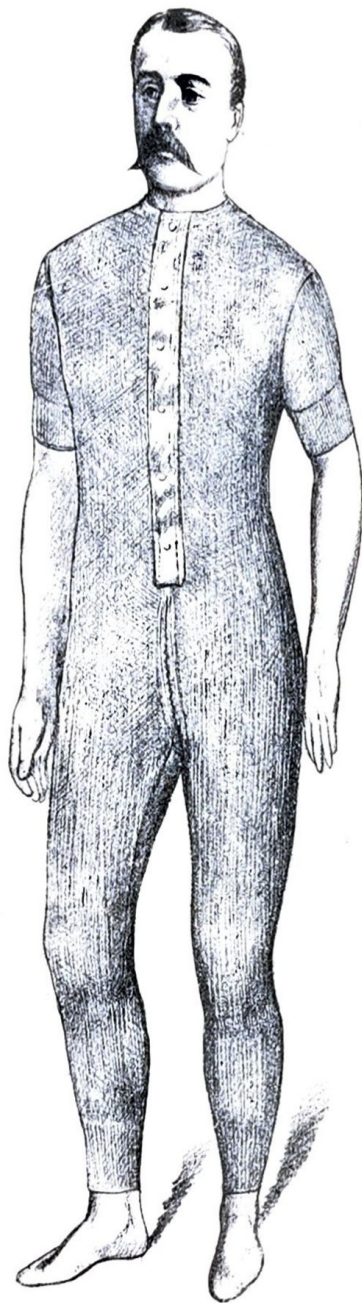
Raise 25 times at left of machine.

Knit 8 rounds between raisings.

Knit 200 rounds after last raising, and run work out.

When machine is fitted up with open side apparatus, it must be put in work on completing last raising to open at left side of machine. When this cannot be done the work must be cut down to last raising, and gusset inserted as in ribs 1 and 1.

The beauty of this garment is left to the good taste of the finisher.



Instruction XXV.

Gents' Combination.

(In Ribs 1 and 1.)

Knit from fine Andalusian and Silk Wools, or fine Merino Yarns. This garment is made in our parts.

BACK PART

Push up 50 needles each side, and set for ribs 2 and 1.

Knit 70 rows, ribs 2 and 1, tensions at about 8.

Push up vacant needles on back row, open all latches, and commence knitting, knit 4 rows in 1 and 1, altering tensions one gauge coarser.

Raise 50 times at one edge.

Knit 4 rows between raisings.

Knit 100 rows after last raising.

Narrow 10 times at each corner.

Knit 6 rows between narrowings.

Knit 180 rows for body after last narrowing, and run work out.

Make 2 pieces like this. Raise one right, the other left of machine.

Instruction XXV. (continued).

FRONT PART

Push up 50 needles each side.

Knit 70 rows, 2 and 1, as in back part.

Knit 4 rows, 1 and 1, altering needles and tensions as in back part.

Raise 50 times at one edge.

Knit 4 rows between raisings.

Knit 100 rows after last raising.

Narrow 10 times at outside edge of work.

Knit 6 rows between.

Knit 180 rows for body.

Make one piece for right, the other piece for left side; the narrowed edge coming on the outside of the garment, the straight edge up the centre.

SLEEVES

Push up 120 needles each side.

Knit 130 rows, 1 and 1.

Narrow 11 times at both edges.

Knit 6 rows between.

Knit 50 rows, 2 and 1, for cuff.

Insert a gusset under arm of sleeve.

Push up 45 needles.

Knit 65 rows.

* This garment must be finished to button from fork at front. By adding a narrow band knit in the Leicester stitch round the neck and cuffs, may be made to serve for shirt, under-vest, and drawers, only requiring the one garment. Weight about $1\frac{1}{2}$ lbs.

Instruction XXV. (continued).

MEASURE

Length of leg 23".

Length to fork 27".

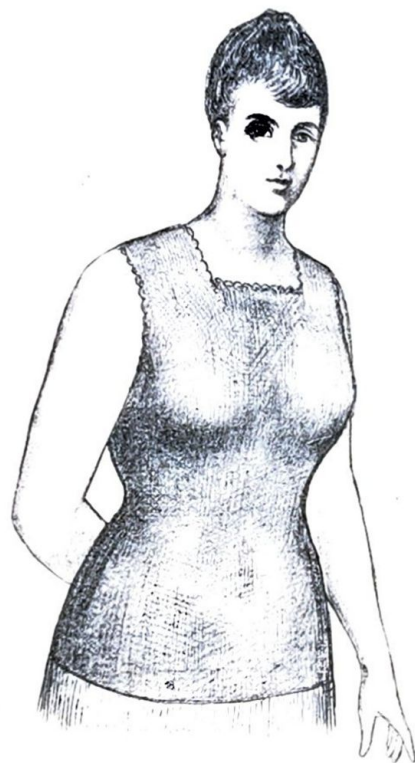
Extreme length $48\frac{1}{2}$ ".

Width of body above narrowing $19\frac{1}{2}$ ".

Width of body at fork $11\frac{1}{2}$ ".

Length of sleeve 21".





Instruction XXVI.

Ladies' Plain Knit Undervest.

From fine Merino 4 Ply Yarn about 20's counts, or Scotch Fingering about same counts.

Tensions 1 and 2 at 12, 3 and 4 at 7. Stops all out.

Push up 136 needles each side.

Knit 105 rounds.

Narrow 20 times at each corner.

Knit 2 rounds between narrowings.

Knit 40 rounds for waist after last ditto.

Raise 20 times at each corner.

Knit 2 rounds between raisings.

Knit 140 rounds after last narrowing, and run work out.

SLEEVES

Push up 70 needles each side.

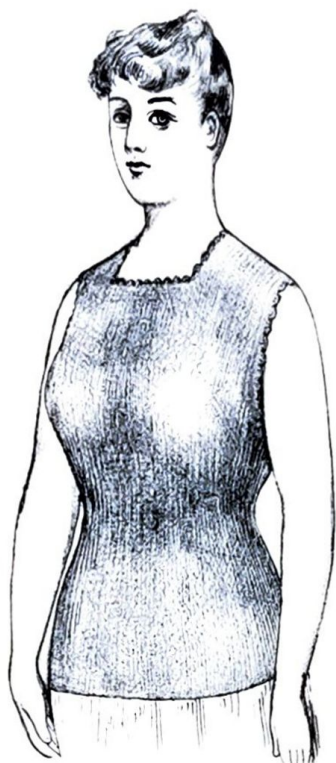
Knit 20 rounds.

Narrow 20 times at left of machine, both rows.

Knit 2 rounds between.

Knit 25 rounds after last narrowing, and run work out.

The neck and arm-holes must be cut out, turned inside, and back-stitched over. Insert the sleeves. The commencement of the work is the top part of vest.



Instruction XXVII.

Ladies' Undervest.

From Merino Yarns, knit in ribs 1 and 1.

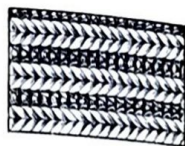
Tensions all at 9. Stops as for ribs.

SQUARE NECK

Push up 80 needles on each side.

Knit 550 rows.

Take a piece of wool of another shade, and knit on to it 40 stitches from each side of machine, out of centre of work, and pull empty needles down, leaving 20 stitches on each side. Put small set-up comb into work at end where crank is, hang on the weight, and knit 50 rows for shoulder; turn crank over to other side, pulling thread down in centre, and repeat same at the other corner. Then push up the needles in centre, open all the needle latches, turn crank over, put in set-up comb, and hang on the weight; knit 550 rows, and run work out.



Instruction XXVIII.

Ladies' Drawers.

(In ribs 1 and 1.)

Knit from fine Andalusian or fingering wools.

Tensions at 9 or 10. Stops as for ribs.

Push up 136 needles each side of machine.

Knit 70 rows.

Narrow 15 times on one side.

Knit 4 rows between narrowings.

Narrow 18 times at all corners.

Knit 6 rows between.

Knit 70 rows ribs, 2 and 1, after last narrowing.

Make 2 pieces like this. The first 15 narrowings must be made, one right and the other left. In finishing, seam up the leg to the top of the 18 narrowings; bring the other 15 narrowings together for front of garment, straight edges to the back. Stitch the front part from commencement of work to first narrowing, leaving the back part open. Knit a plain band about 2" broad, in Cardigan rib, set on the top required width for waist, and fasten with two buttons at the back.

Extreme length, 33"

Length of body, 17"

Length of leg, 17"

Length to vent at front 8½" Weight about 12oz.

Instruction XXIX. (continued).

FRONT PARTS

Push up 50 needles each side.

Knit 60 rows in ribs 2 and 1.

Knit 4 rows.

Raise 37 times at one edge of work.

Knit 4 rows between narrowings.

First narrow 8 times on raised edge.

Then narrow 4 times at all corners.

Continue to narrow 8 times more on straight side of work.

Knit 4 rows between narrowings.

Knit 220 rows for body, and run work out.

Do two pieces, one right, the other left.

QUARTER SLEEVES

Push up 110 needles each side.

Knit 20 rows.

Narrow nine times at each corner.

Knit 2 rows between narrowings.

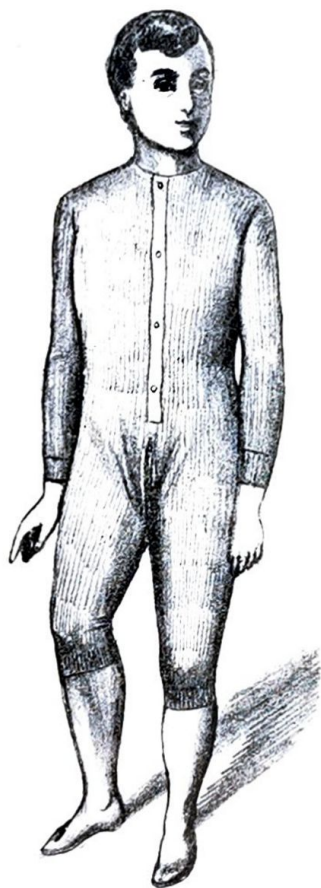
Knit 10 rows after last narrowings.

Knit 50 rows of ribs, two and one, and run work out.

Instruction XXIX. (continued).

LADIES' COMBINATIONS: Size in Inches.

Length of body to fork	...	27".
" leg	...	18".
" vent, from neck	...	14".
Width of fork at front	...	20".
" at back	...	22".
" body in centre	...	15".
Length of sleeve	...	9".
Weight about	1 $\frac{1}{4}$ lbs.	



Instruction XXX.

Combination for Little Boy.

(3 Years Old.)

Rib 1 and 1, of 3 Fold Scotch Fingering 18's, drab or white.

Push up 70 needles each side.

Knit 30 rows at a tight tension, then alter tension to
about 9.

Raise 6 times at each corner.

Knit 6 rows between raisings.

Knit 60 rows after last raising.

Narrow 6 times at left side.

Knit 6 rows between narrowings.

Knit 110 rows for body, and run work out.

Do 2 pieces, one right, the other left.

SLEEVES

Push up 65 needles.

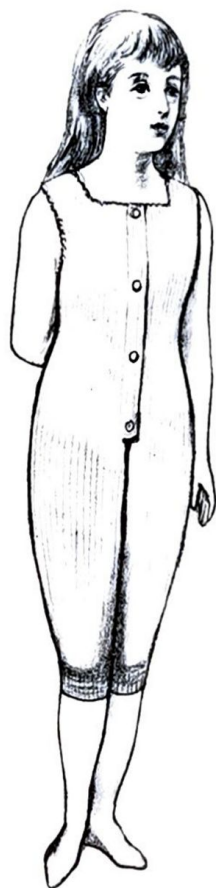
Knit 10 rows.

Narrow 4 times.

Knit 6 rows between.

Knit 65 rows after last narrowing.

Knit 40 rows 2 and 1 rib.



Instruction XXXI.

Combination for Little Girl.

(Three Years old.)

Ribs 1 and 1, of 3 Fold Scotch Fingering 18's. Tensions at 10.

Push up 70 needles each side.

Knit 30 rows of ribs 2 and 1.

Raise 6 times at each corner.

Knit 6 rows between raisings.

Knit 60 rows after last raisings.

Narrow 6 times at left side.

Knit 6 rows between narrowings.

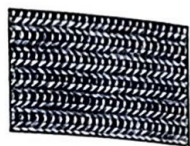
Knit 85 rows after last narrowings.

Take a piece of wool of another shade, and knit 19 stitches from each corner on to it, and drop stitches down between beds.

Knit 25 rows, and run work out.

Do two pieces like this. Narrow one at right, the other at left of machine.

In finishing selvedge, the stitches thrown off to form neck. Cut out the arm-holes, and finish off with crochet work.



Instruction XXXII.

Theatrical Tights and Stockings combined.

Off 5 Ply Yarn counts, about 16's.

Push up 65 needles each side.

Knit 180 rounds plain knit.

Narrow 18 times at left corners.

Knit 8 rounds between.

When side open apparatus is attached to machine, it must be used until commencing to narrow, otherwise it will have to be cut down to fork.

Knit 50 rounds after last narrowing.

Narrow 8 times down back of leg for stocking.

5 rounds between narrowings.

Knit 40 rounds for ankle.

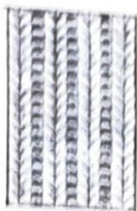
Set heel as for plain stocking.

Knit 28 rows for heel.

Knit 70 rounds for foot, including the narrowings of the gore.

Narrow toe out as for plain stocking.

Insert a small gusset at fork, sew up both front and back, put straps on top for belt to pass through.



Instruction XXXIII.

Boy's Open-breasted Jersey, WITH SAILOR COLLAR.

SIZE 1.

Knit off 4-fold Scotch Fingering, 18's counts.
Tensions 1 and 2 at 12, 3 and 4 at F, stops as for ribs.

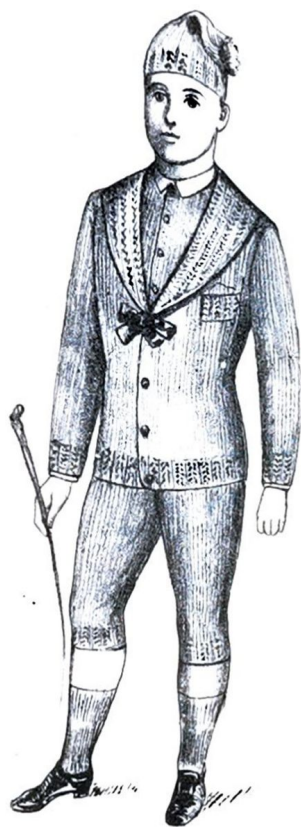
BACK

Push up 50 needles each side.
Rack 52 rows every four rows.
Knit 240 rows plain Cardigan.
Narrow 2 stitches out at each corner.
Knit 100 rows and run work out.

Left-Side Front

Push up 33 needles each side.
Rack 52 rows every four rows.
Knit 200 rows plain Cardigan.
Take a piece of wool of another shade, throw off 3 stitches each side to right of machine, throw off 7 stitches each side to left of machine, pull needles down.
Rack 40 rows every four rows for pocket cover, and run work out.

Push up again the 7 needles at left, and the 3 needles at right of machine that were pulled down out of work, hook the stitches thrown off on to them, open latches of vacant needles in centre, turn crank to left, put in the set-up comb, and knit 40 rows to complete waist.



Instruction XXXIII.

Boy's Open-breasted Jersey, WITH SAILOR COLLAR. SIZE 1.

Knit off 4-fold Scotch Fingering, 18's counts.
Tensions 1 and 2 at 12, 3 and 4 at F, stops as for ribs.

BACK

Push up 50 needles each side.
Rack 52 rows every four rows.
Knit 240 rows plain Cardigan.
Narrow 2 stitches out at each corner.
Knit 100 rows and run work out.

Left-Side Front

Push up 33 needles each side.
Rack 52 rows every four rows.
Knit 200 rows plain Cardigan.
Take a piece of wool of another shade, throw off 3 stitches each side to right of machine, throw off 7 stitches each side to left of machine, pull needles down.

Rack 40 rows every four rows for pocket cover, and run work out.

Push up again the 7 needles at left, and the 3 needles at right of machine that were pulled down out of work, hook the stitches thrown off on to them, open latches of vacant needles in centre, turn crank to left, put in the set-up comb, and knit 40 rows to complete waist.

82
Instruction XXXIII. (continued).

Narrow out 2 stitches at right of machine.
Knit 2 rows between.
Knit 75 rows for arm-hole.

Throw off 5 stitches to left of machine, back and front.
Narrow 7 stitches out for neck at same side stitches are thrown off.

Knit 4 rows between narrowings.
Knit 40 rows and run work out.

Right-Side Front

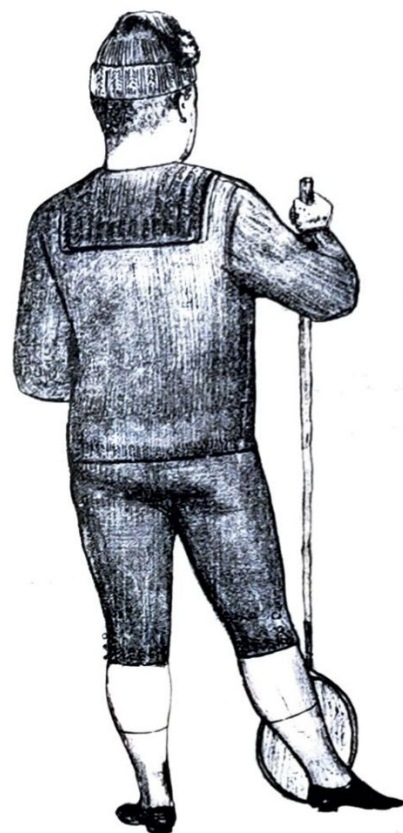
Push up 33 needles each side.
Rack 52 rows every four rows.
Knit 240 rows plain Cardigan.
Narrow 2 stitches out each side at left of machine.
Knit 2 rows between.
Knit 75 rows for arm-hole.
Throw off 5 stitches each side at right of machine.
Narrow 7 times for neck at right of machine.
Knit 4 rows between narrowings.
Knit 40 rows and run work out.

SAILOR COLLAR

Push up 50 needles both sides.
Rack 170 rows every four rows.
Throw off in centre of machine 18 stitches on each row.

Put in set-up comb and work down one side of collar at once.

Rack 80 rows and commence to narrow out on the out edge, knitting 8 rows between narrowing until half of stitches are narrowed out; narrow remainder four rows between until all are narrowed out. Repeat same on the other side of collar.



Instruction XXXIII. (continued). 84

SLEEVES

Push up 48 needles each side.
 Knit 110 rows.
 Narrow 4 times.
 Knit 26 rows between narrowing.
 Rack 64 rows every four rows.
 Leicester stitch may be used in racking, if preferred.

TROUSERS

Push up 50 needles each side.
 Rack 52 rows every four rows.
 Knit 26 rows plain Cardigan.
 Raise 4 times at each corner.
 Knit 26 rows between.
 Knit 60 rows after last raising.
 Narrow 4 times on one side.
 Knit 26 rows between.
 Knit 75 rows after last narrowing.
 Knit 40 rows, ribs 1 and 1, and run work out.
 Narrow one piece out at right, the other left of machine.



85

Instruction XXXIII. (continued).

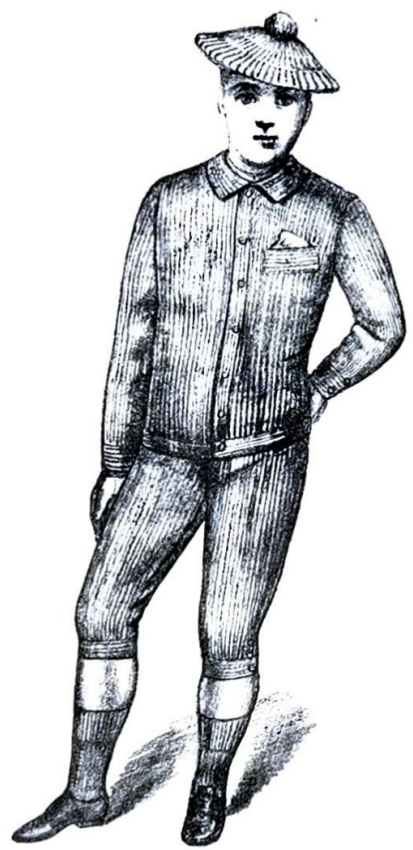
Tables in Inches FOR Sailor Collar Suit. SIZE 1. (When finished.)

JERSEY

	inches.
Length of waist up to sleeve ...	11½
" " arm-hole at back ...	3½
" " front up to sleeve ...	11½
" " " arm-holes ...	4½
Extreme length of Jersey ...	15

TROUSERS

	inches.
Length of leg to fork ...	8
" " back ...	8
" outside ...	16
SLEEVE.	
Extreme length ...	10½



Instruction XXXIV.
Boy's Jacket Suit,
 WITH ROUND COLLAR.
 SIZE 1.

4 Ply super Scotch Fingering, 18's counts.

BACK

Push up 50 needles each side.
 Rack 52 rows for border, Leicester stitch.
 Knit 210 rows for waist, plain Cardigan.
 Narrow 2 stitches out at each corner.
 Knit 2 rows between narrowings.
 Knit 75 rows for arm-hole.
 Narrow down at each corner until 18 stitches remain
 on each side, knit 4 rows between narrowings, and run
 work out.

Left-Side Front

Push up 33 needles each side.
 Rack 52 rows for border, Leicester stitch.
 Knit 170 rows plain Cardigan.
 Throw off 3 stitches each side at right of machine.
 Throw off 7 stitches each side at left of machine.
 It is the safest way to thread these stitches on to
 a piece of wool of another shade.
 Rack 40 rows every two rows Leicester stitch, for
 Pocket Cover, and run work out.
 Push up the 7 needles at left of machine.
 Push up the 3 needles at right of machine.
 Hook the stitches on again that were thrown off,
 open latches of needles in centre of machine, and set up
 again and knit 40 rows to complete waist.

88
Instruction XXXIV. (continued).

Narrow 2 stitches out at right of machine for under arm.

Knit 2 rows between narrowings.

Knit 75 rows for arm-hole.

Throw off 5 stitches at left of machine.

Narrow 4 times at same side the stitches are thrown off.

Knit 2 rows between narrowings.

Narrow 4 times more.

Knit 4 rows between narrowings.

Knit 40 rows and run work out.

Right-Front

Push up 33 needles each side.

Rack 52 rows every two rows for border, Leicester stitch.

Knit 210 rows plain Cardigan for waist.

Narrow out 2 stitches at left of machine.

Knit 2 rows between narrowings.

Knit 75 rows for arm-hole.

Throw off 5 stitches at right of machine.

Narrow 4 stitches each side at right of machine.

Knit 2 rows between.

Narrow 4 stitches more each side at right of machine.

Knit 4 rows between.

Knit 40 rows and run work out.

COLLAR

Push up 75 needles at each side for collar.

Rack 80 rows every 2 rows, Leicester stitch, and run work out.

Instruction XXXIV. (continued).

SLEEVES

Push up 48 needles each side.

Knit 110 rows.

Narrow 4 times at each corner.

Knit 26 rows between narrowings.

Rack 64 rows for cuff every two rows, Leicester stitch, and run work out.

TROUSERS

Push up 50 needles each side.

Rack 52 rows for border every two rows, Leicester stitch.

Knit 26 rows.

Raise 4 times at each corner.

Knit 26 rows between raisings.

Knit 60 rows after last raising.

Narrow 4 times at one edge, both sides.

Knit 26 rows between each narrowing.

Knit 75 rows after last narrowing.

Knit 40 rows of ribs 1 and 1, and run work out.

Make 2 legs; narrow one out at right, the other at left of machine.



Boy's Jacket Suit.

SIZE 2.

Knit from same Yarn as Size 1.

BACK

Push up 55 needles each side.
Rack 52 rows every two rows, Leicester stitch.

Knit 240 rows plain Cardigan for waist.

Narrow 2 stitches out under arm.

Knit 2 rows between.

Knit 80 rows for arm-hole.

Narrow down at each corner to 20 stitches each side.

Knit 4 rows between narrowings, and run work out.

Left-Side Front

Push up 35 needles each side.

Rack 52 rows for border every two rows, Leicester stitch.

Knit 200 rows plain Cardigan for waist.

Throw off 4 stitches each side at right of machine on to a piece of wool another shade.

Throw off 7 stitches each side at left of machine on to a piece of wool another shade.

Rack 40 rows every two rows, Leicester stitch. Leave crank to right.

Push up the 7 needles at left of machine.

Push up the 4 needles at right of machine.

Hook the stitches on again that were thrown off, open latches of needles in centre of machine, set up again and knit 40 rows to complete waist.

Instruction XXXV. (continued).

Narrow 2 stitches out each side at right of machine for under arm.

Knit 2 rows between narrowings.

Knit 80 rows for arm-hole.

Throw off 5 stitches at left edge of machine.

Narrow 4 times at same side the stitches are thrown off.

Knit 2 rows between.

Narrow 4 times more.

Knit 4 rows between.

Knit 40 rows and run work out.

Right-Front

Push up 35 needles at each side.

Rack 52 rows every two rows for border, Leicester stitch.

Knit 240 rows plain Cardigan.

Narrow 2 stitches out each side at left of machine.

Knit 2 rows between narrowings.

Knit 80 rows for arm-hole.

Throw off 5 stitches each side at right of machine.

Narrow 4 times at same side stitches are thrown off.

Knit 2 rows between.

Narrow 4 times more.

Knit 4 rows between.

Knit 40 rows after last narrowing, and run work out.

COLLAR

Push up 80 needles, and rack 80 rows every two rows, Leicester stitch, and run work out.

92
Instruction XXXV. (continued).

SLEEVES

Push up 50 needles each side.

Knit 130 rows.

Narrow 4 times at each corner.

Knit 28 rows between narrowings.

Rack 64 rows for cuffs every two rows, Leicester stitch, and run work out.

TROUSERS

Push up 55 needles each side.

Rack 52 rows for border every two rows, Leicester stitch.

Knit 26 rows plain Cardigan.

Raise 5 times at each corner.

Knit 26 rows between raisings.

Knit 60 rows after last raising.

Narrow 5 times at one edge, both sides.

Knit 26 rows between each narrowing.

Knit 80 rows after last narrowing.

Knit 40 rows of ribs 1 and 1, and run work out.

Make 2 legs; narrow one out at right, the other at left of machine.



Instruction XXXVI.

Boy's Jacket Suit, WITH ROUND COLLAR.

SIZE 3.

Knit from same Yarn as Sizes 1 and 2.

BACK

Push up 65 needles each side.

Rack 52 rows for border every two rows, Leicester stitch.

Knit 270 rows plain Cardigan for waist.

Narrow out 2 stitches at each corner.

Knit 2 rows between narrowings.

Knit 90 rows for arm-hole.

Narrow at each corner until 22 stitches remain at each side.

Knit 4 rows between narrowings, and run work out.

94
Instruction XXXVI. (continued).

Left-side Front.

Push up 37 needles at each side.

Rack 52 rows for border every two rows, Leicester stitch.

Knit 220 rows plain Cardigan.

Throw off 8 stitches each side at left of machine.
Knit on to a piece of wool of another shade.

Throw off 4 stitches each side at right of machine.

Rack 50 rows for pocket every two rows, Leicester stitch, and run work out.

Push up 8 needles at left of machine, each side.

Push up 4 needles at right of machine, each side.

Hook the stitches on again that were thrown off, open latches of needles in centre of machine, set up again and knit 50 rows to complete waist.

Narrow 2 stitches out at right of machine for under arm.

Knit 2 rows between narrowings.

Knit 90 rows for arm-hole.

Throw off 5 stitches at left of machine.

Narrow 4 times at same side stitches are thrown off.

Knit two rows between.

Narrow 4 times more same side.

Knit 4 rows between.

Knit 50 rows after last narrowing, and run work out.

95

Instruction XXXVI. (continued).

Right-hand Front

Push up 37 needles on each side.

Rack 52 rows for border every two rows, Leicester stitch.

Knit 270 rows plain Cardigan for waist.

Narrow 2 stitches out at left of machine.

Knit 2 rows between narrowings.

Knit 90 rows for arm-hole.

Throw off 5 stitches at right of machine.

Narrow 4 times at same side as stitches are thrown off.

Knit 2 rows between.

Narrow 4 times more.

Knit 4 rows between.

Knit 50 rows after last narrowing, and run work out.

COLLAR

Push up 85 needles each side, rack 88 rows every two rows, and run out.

SLEEVES

Push up 52 needles each side.

Knit 150 rows.

Narrow 5 times at each corner.

Knit 28 rows between narrowings.

Rack 64 rows every two rows for cuff, Leicester stitch.

96
Instruction XXXVI. (continued).

TROUSERS

- Push up 60 needles each side.
Rack 52 rows for border every two rows, Leicester stitch.
Knit 28 rows plain Cardigan.
Raise 6 times at each corner.
Knit 28 rows between raisings.
Knit 60 rows after last raising.
Narrow 6 times at one edge, both sides.
Knit 28 rows between.
Knit 90 rows after last narrowing.
Knit 40 rows of ribs 1 and 1, and run work out.
Make 2 legs; narrow one out at right, the other at left of machine.



97

Instruction XXXVI. (continued).

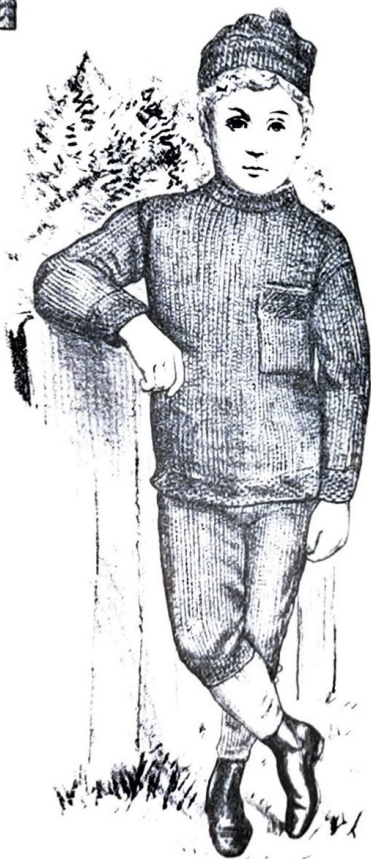
Table in Inches of BOYS' JACKET SUITS (when finished).

JACKET		1	2	3
	Size			
Length of waist up to sleeve	...	10"	11"	12"
Extreme length of back	...	15"	16"	17"
" " " sleeve	...	10½"	11½"	12½"

TROUSERS

Outside leg measure	...	16"	18"	20"
Inside leg	"	8"	9"	10"
Length of back...	...	8"	9"	10"

When the yarn does not come up to size, the number of rows must be regulated to make the size in inches. These tables have been calculated from the machine with split-locks, and racked on the front bed. When machine is racked on back bed, the arrangement for shaping will be reversed.



Instruction XXXVII.

Boys' Suits.

Jersey to pull over head, with Duncce Cap, in Cardigan Stitch.

SIZE 1 TO 4.

Knit from same yarn as Jacket Suits.

JERSEY

Size	1	2	3	4
No. of needles to be pushed up at each side of machine ...	55	55	60	65
No. of rows to be racked for border ...	52	52	52	52
No. of rows plain Cardigan for body ...	320	370	420	470
No. of stitches to be thrown off at each corner of machine for shoulder ...	14	14	15	17
Change remaining stitches to knit ribs 1 and 1 ...	26	26	28	30
No. of rows to knit...				

Make a piece of Knitting and set it on left-side of Jersey for pocket, if required.

Instruction XXXVII. (continued).

SLEEVES

	Size			
	1	2	3	4
No. of needles up each side of machine ...	50	52	55	55
No. of rows to knit...	—	—	10	10
„ times to narrow ...	—	—	2	2
„ rows between ...	—	—	10	10
„ rows after last narrowing	200	220	250	290
„ times to narrow again ...	4	5	5	5
„ rows between ...	18	20	20	20
„ rows to rack for cuff ...	64	64	64	64

SIZES IN INCHES.

Length of jersey ...	15"	17"	19"	21"
Width „ ...	8½"	8½"	9"	9½"
Length of sleeve ...	12"	12½"	13½"	14½"

Instruction XXXVII. (continued).

TROUSERS

	Size			
	1	2	3	4
No. of needles to put up each side of machine ...	50	55	65	70
No. of rows to rack for border ...	52	52	52	52
„ rows to knit plain Cardigan	26	26	28	30
„ times to raise ...	4	5	6	7
„ rows to knit between raisings	26	26	28	30
„ rows to knit after last raising	60	60	60	60
„ times to narrow (making two pieces) ...	4	5	6	7
Narrow one at right, the other at left of machine				
No. of rows to knit between narrowings	26	26	28	30
„ rows to knit after last narrowings ...	75	80	90	95
No. of rows to knit in ribs 1 and 1	40	40	40	40

Sizes in inches same as in Jacket Suits.



Instruction XXXVIII.

Kilted Suit, FOR BOY THREE YEARS OLD.

Knitted from a fine 3 Ply Scotch Fingering, 20's counts.

Tensions 1 and 2 about 13. Stops as for ribs.

Needles to be arranged 5 in work and 3 down on back and front bed.

Racked every two rows.

Make the skirt in 3 width when machine is large enough.

Push up 136 needles each side of machine. Arrange as above.

FRONT WIDTH

Knit 270 rows. Rack every two rows.

Knit 20 rows in ribs, 1 and 1.

BACK WIDTHS

Knit 2 widths.

Push up 98 needles each side of machine. Arrange as per instruction above.

Knit 270 rows. Rack every two rows.

Knit 20 rows ribs 1 and 1.

Back part of skirt must be pleated in finishing.

Instruction XXXVIII. (continued).

104

BODY

Push up 64 needles each side of machine.
 Knit 80 rows in ribs 1 and 1.
 Throw off 6 stitches each corner for under arm.
 Knit 60 rows and run work out.
 Make 2 pieces like this, back and front.

Size in Inches when finished.

Depth of skirt	10½".
Width of skirt at bottom	21".
Width of skirt at top	12½".
Length of body to arm-hole	6".
Length of arm-hole	5".



105

Instruction XXXIX.

Jacket for Kilt.

WITH DUNCE CAP.

BACK

Push up 60 needles each side of machine.
 Rack 44 rows every two rows, for border.
 Knit 200 rows for body.
 Throw off 3 stitches for under arm.
 Knit 75 rows for arm-hole.
 Narrow down to 28 stitches each row.
 Knit 4 rows between narrowings, and run out.

FRONT

Push up 30 needles each side of machine.
 Rack 44 rows for border.
 Knit 70 rows up to pocket-hole.
 Throw off 20 stitches back and front in centre of work. Open latches of needles, and set up the 20 needles again, and continue to knit 130 rows up to arm-hole.
 Narrow 2 stitches out for under arm at left of machine.

Instruction XXXIX. (continued).

106

Knit 75 rows for arm-hole.

Narrow 6 times at right of machine.

Knit 2 rows between narrowings.

Narrow 4 times at same side.

Knit 4 rows between.

Knit 40 rows after last narrowing, and run work out. Make two pieces like this, one right, the other left.

Make a piece of racked trimming about 6 needles wide, and stitch it on up each front for button and button-holes. Round the corners at bottom in finishing.

POCKET COVERS

Push up 21 needles each side of machine.

Knit 44 rows. Rack every two rows for pocket covers.

COLLAR

Push up 80 needles each side of machine.

Knit 60 rows, rack every two rows, and run work out.

Collar, front of jacket pocket covers, and cuffs of sleeves, may be bound with satin or braid to match, for superior finish.

Sleeves for Jacket

Push up 45 needles each side of machine.

Knit 150 rows Cardigan stitch.

107

Instruction XXXIX. (continued).

Narrow 4 times at each corner.

Knit 22 rows between narrowings.

Knit 56 rows after last narrowing. Rack every two rows for cuff and run work out.

Sizes of JACKET in Inches.

Extreme length of back...	...	...	13"
Width at bottom ...	...	...	9½"
Length of sleeves...	...	...	9¼"



Instruction XL.

108

Tam o'Shanter Caps.

SIZE 1.

For Illustration, see page 86.

Push up 110 needles each side.
Knit 30 rows of ribs 1 and 1 at a tight tension.
Then knit 120 rows in plain Cardigan.
Move bed 3 times when crank is at left.
Knit 40 rows more.
Move bed 3 times again when crank is at left.
Set tensions for plain rib 1 and 1, knit 20 rows
and run out.
Block on a ring of strong wire to give shape.

Instruction XLI.

Sweep Cap.

SIZE 1.

For Illustration, see page 80.

Push up 120 needles each side.
Rack 60 rows for border to match suit.
Knit 140 rows plain Cardigan.
Alter for ribs 2 and 1, taking out the needles at
same side of work that is racked.
Knit 70 rows 2 and 1, and run work out.
Finish with a large rosette of wool in front.

109

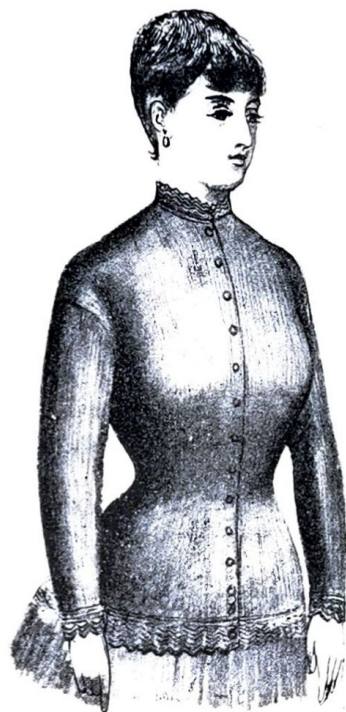
Instruction XLII.

Dunce Cap.

For Illustration, see page 98.

Push up 120 needles each side.
Rack 60 rows to match suit.
Knit 140 rows plain Cardigan.
Knit 16 rows of ribs 1 and 1, and run work out.





Instruction XLIII.

Ladies' Jackets.

Knit from 3 ply super fingering, Cardigan stitch, counts about 18's.
Tensions 1 and 2 at 12, 3 and 4 at *F*. If knit on Split-lock machine,
follow instruction No. 9.

FRONT PART

Push up 50 needles at each side of machine.

Knit 50 rows for waist.

Narrow 12 times on one edge of work.

Knit 8 rows between.

Knit 80 rows after last narrowing, for waist.

Raise 12 times at same edge as narrowings.

Knit 12 rows between raisings.

Knit 12 rows after last raising.

Throw off 4 stitches at same edge as raisings are,
and narrow three stitches out for under arm.

Knit 2 rows between narrowings.

Knit 140 rows for arm-hole.

Narrow 7 times on straight edge.

Knit 10 rows between, after last narrowing turn
crank over and raise one stitch each side of machine,
then raise and narrow twice more, knitting 10 rows
between raising.

Knit 30 rows and run work out.

Knit 2 pieces of work, narrow one right and the
other left.



Instruction XLIII. (continued).

BACK PART

Push up 55 needles at each side of machine.
Knit 50 rows for skirt.

Narrow 12 times at each corner of machine.
Knit 8 rows between narrowings.

Knit 80 rows for waist after last narrowing.
Raise 12 times at one edge of work, both sides.

Knit 8 rows between raisings.
Knit 8 rows after last raising.

Throw off 4 stitches at same edge as raisings, and narrow three stitches out with apparatus, with one eyelet in.

Knit 2 rows between narrowings.
Knit 130 rows for arm-hole.

Narrow at the same corners that the stitches that were thrown off, until 10 stitches remain on each side, knit four rows between narrowings for shoulder, and run work out.

Make 2 pieces like this, narrowing one out at left, the other at right of machine.

A box pleat or improver may be inserted in the back of skirt, if desired. To do this, commence by pushing up 70 needles in each piece. Narrow 12 times on one side only. When narrowings are completed take a piece of wool of another shade and knit 27 stitches off each side of machine on to it at the opposite end to the narrowings. Slip the stitches off and continue knitting the waist, raise as per instructions. When finishing, the pleat may be formed according to taste.

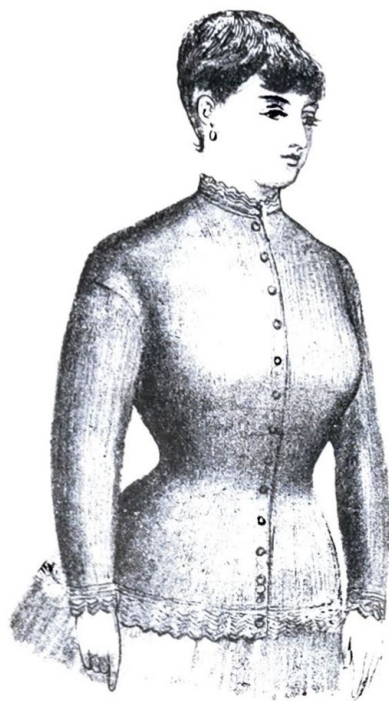
SLEEVES

Push up 60 needles each side.
Knit 10 rows.

Narrow 2 times.
Knit 10 rows between.

Knit 350 rows.
Narrow 5 times at each corner.

Knit 26 rows between.
Knit 40 rows after last narrowing, and run work out.



Instruction XLIV.

Trimming for Ladies' Jackets.

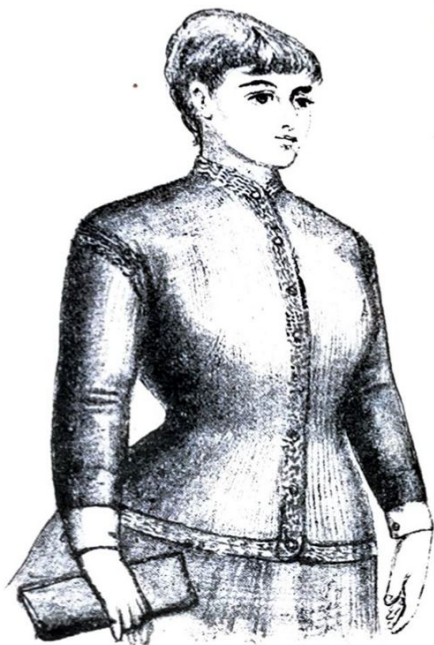
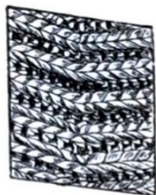
The jacket is much improved by a trimming being stitched round the skirt and cuffs of sleeves. The machine is rich in producing trimmings and fringes. A very suitable scalloped trimming is produced by the following instruction.

Arrange on the back row 12 needles, one in work and one down, that is, every alternate needle in work. If machine racks on front bed arrange the racking motion so that bed will move to the left. Commence to arrange needles on front row at left of machine by pushing up first two needles together. Let first needle be in advance of the first needle on the back. The second needle on front must pass the first needle on back when bed is moved. Then arrange 8 more needles, one up and one down, same as in the back row. Let the 11th needle be the succeeding needle to the 10th. Then one out of work, then one in work, then one out of work, then one in work. There will then be 13 needles in work on the front row, and 12 needles on the back row. Set up work, knit one plain round, and move racking lever every row, that is at each edge of work, 15 times. Crank will then be at right. Knit the 16th row from right to left, without moving bed. When crank is at left, move bed again 15 times as before, and repeat same operations the required length of trimming.

Back row	|	|	|	|	|	|	|	|	|	|	|
Front row	|	|	|	|	|	|	|	|	|	|	|

A narrower trimming for cuffs, and round arm-holes of ladies' sleeveless jackets, may be produced by taking a few needles out of centre.

Sleeveless jackets are made from same instructions, trimming round the arm-holes in lieu of sleeves.



Instruction XLV.

Sleeveless Jacket.

(Leicester Pattern.)
In Cardigan stitch.

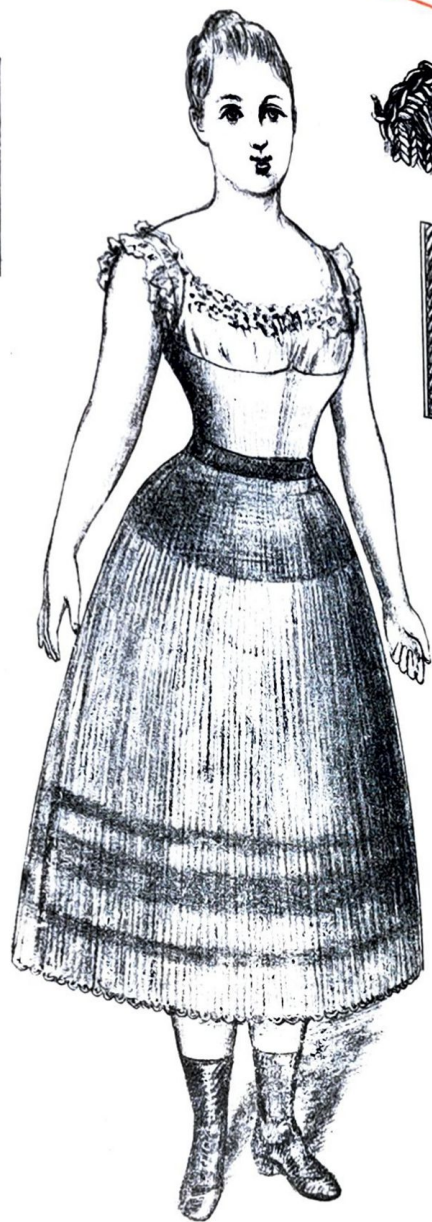
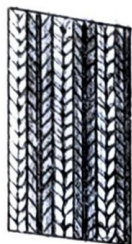
Yarn and tensions same as Ladies' Jackets.

BACK PART

Push up 76 needles each side.
Rack 28 rows every 4 rows.
Knit 60 rows for skirt.
Narrow 7 times at each corner of machine.
Knit 10 rows between narrowings.
Knit 80 rows for waist.
Raise 7 times at each corner.
Knit 14 rows between raisings.
Slip off 3 stitches at each corner for under arm.
Knit 130 rows for arm-hole.
Narrow 20 times at each corner.
Knit 4 rows between, and run work out.

FRONTS

Push up 50 needles each side of machine.
Rack 28 rows every 4 rows.
Knit 60 rows for skirt.
Narrow 7 times at one edge, back and front.
Knit 10 rows between narrowings.
Knit 80 rows for waist.
Raise 7 times at same side as narrowings.
Knit 14 rows between.
Throw off 4 stitches at same side shaping is done.
Knit 140 rows for arm-hole.
Narrow 6 times on straight side, turn crank over, and raise 1 needle.
Knit 6 rows between narrowings.
Then raise every alternate narrowing until 10 narrowings are completed.
Knit 6 rows between.
Knit 10 rows, and run work out.
Do one right and the other left. Make a narrow slip of plain trimming to match border for round neck and down front, finishing with a rounded corner at bottom.



Instruction XLVI.

Ladies' Skirts. Fancy Stitch

Use 3 Ply Fingering Wools, counts 20's. A soft-spun Yarn, rather lofty, makes the best Skirts.

Set tensions 1 and 2 at 14. 3 and 4 at 16. Stops as for ribs.

Push up 140 needles at each side. Arrange needles as for ribs, two and two. Move bed so that the needles cross each other. (If this is not done, the selvedge will be very open and loose.) Set up the work as for Cardigan. Put comb up through the loops, and knit a plain round. Now move the bed back, so that the needles come to original position. They will now be set as for knitting ribs two and two.

Knit 360 rows in Cardigan, rack every 4 rows. Then leave needles in position first arranged. Set tensions all at one number for ribs at about 9.

Knit 70 rows of ribs two and two. Make 3 pieces like this. Finish skirt bottom with a trimming similar to Ladies' Jacket, or trim with crotchet work. Top may be finished either with a knitted or cotton band, required width for waist. There are a great variety of fancy stitches suitable for skirts. Always choose the most open pattern to make skirts as light as possible.



Instruction XLVII.

Child's Princess Costume.

(Two Years old). SIZE 1.

Cardigan stitch. Knit from 3 Ply Fingering Wool, counts 18's.
Tensions set at about 14. Stops as for ribs.

Arrange needles as per Instruction No. 2 for fancy stitches. There are many kinds of fancy stitches which may be introduced into these garments, which give a much better effect in some shades of wools than others. The good taste of the knitter must determine the pattern.

SKIRT

Push up 110 needles each side. Dispose the needles as per Instruction No. 2.

Knit 180 rows. Rack every 4 rows. Change tension to knit ribs one and one, and knit 40 rows, and run work out.

Make 4 widths like this, for skirt.

SHOULDER CAPE

Knit another width, same as for skirt, for back part of cape.

Knit 150 rows, racked every 4 rows, and change tensions for ribs one and one.

Knit 6 rows, and narrow at each corner on to next needles in work. Repeat this 4 times, knitting 6 rows between narrowings, and run work out.

SHOULDER CAPE—FRONT PART.

Have in work two-thirds of the needles in work, for back part of cape, which will make 4 complete stripes of the pattern.

Instruction XLVII. (continued). 122

Knit 150 rows, racking every 4 rows, and change tension for ribs one and one. Narrow at that edge of work that will match edge of work in back part of cape, to maintain the pattern, narrowing 4 times at either right or left, for one front. 6 rows between, as in back part. The narrowing meeting at shoulder when finished; the straight edges meeting in front. Make two pieces, one right and one left. Finish around top with crotchet work to run ribbon through, and tie in front with two bows ribbon.

BODY PART—Front

Push up 64 needles each side of machine.

Knit 80 rows in ribs one and one.

Throw off 6 stitches at each corner for under arm.

Knit 60 rows, and run work out.

BACK PART

Push up 36 needles each side of machine.

Knit 80 rows one and one.

Throw off 6 stitches at right of machine for under arm.

Knit 60 rows, and run work out.

Make two pieces like this, and finish to button up back.

The back and front part may be knitted both alike, and the garment made to pull over the head, if preferred.

Make a sash or scarf for running round the top of skirt, 48" long. Set needles so as to have one racked stripe in the centre of two outside plain stripes, to match skirt. Finish with a bow at the back. Let the ends be a little longer than the bows, and crotchet round the ends. The beauty and style of the garment depends very much on the good taste of the finisher.

Instruction XLVII. (continued). 123

SLEEVES

Push up 60 needles on each side of machine.

Knit 50 rows in ribs one and one.

Narrow 5 times each corner.

Knit 4 rows between.

Knit 40 rows, and run work out.

Sew up, and finish end with crotchet work. Turn up about $1\frac{1}{2}$ " to form a cuff.

The knitted "Princess" is a most serviceable garment for a child; is easily made; will wash like a stocking, and look like new every time washed. It is essential they should be made of very light soft wools, fast dyed; Scotch fingering or very fine merino being most suitable.

Size in Inches.

Depth of skirt	...	...	...	9"
Width at bottom of skirt	...	...	...	21"
Width at top of skirt	...	...	...	12 $\frac{1}{2}$ "
Length of body to arm-hole	...	...	...	6"
Length of arm-hole	...	...	...	5"
Length of sleeve...	...	...	...	9"



Instruction XLVIII.

Child's Princess Costume.

(Three to Four Years old.) SIZE 2.

Arrange needles on back row, one in work and one down.

Arrange needles on front row, three in work and one down, so that the centre needle of each group will rack with needle on back. The two outside needles to work plain. See Instruction for fancy stitches.

SKIRT

Push up 136 needles each side of machine, and arrange needles as above.

Knit 210 rows and rack every 4 rows, and change tension to ribs 1 and 1.

Knit 30 rows, and run work out.

Make 4 pieces like this.

CAPE

Push up 136 needles each side of machine, and arrange needles as for skirt.

Instruction XLVIII. (continued).

BACK PART

Knit 160 rows, rack every 4 rows, and change tensions to ribs 1 and 1, and

Knit 6 rows.

Narrow 4 times at each corner for shoulder.

Knit 6 rows between, and run work out

FRONT PART

Push up 68 needles on each side of machine, and arrange as before.

Knit 160 rows, rack every 4 rows, and change tensions to ribs 1 and 1.

Knit 6 rows.

Narrow 4 times at one edge of work for shoulder.

Knit 6 rows between narrowings, and run work out.

Make 2 pieces like this, narrow one out at left, the other right of machine. Finish as per Instructions for size 1.

Make the scarf or sash 4" broad, 48" long, for round waist.

BODY

In Cardigan stitch. If ribs are preferred, enlarge on Instructions given for size 1.

FRONT PART

Push up 54 needles each side of machine.
Knit 160 rows up to arm.

Throw off 5 stitches at each corner of machine.
Knit 120 rows, and run work out.

BACK PART

Push up 30 needles on each side of machine.
Knit 160 rows up to arm.

Throw off 5 stitches at one edge of work.
Knit 120 rows, and run work out.

Make 2 pieces like this and finish to button up back.

SLEEVES

Push up 46 needles each side of machine.
Knit 120 rows.

Narrow 4 times at each corner.

Knit 20 rows between narrowings. Change tension to ribs 1 and 1, and

Knit 40 rows, and run work out.

Turn half the ribs back to form cuff, and finish with crotchet work.

Measure in Inches for Size 2 (finished).

Depth of skirt	...	...	...	12"
Width of skirt at bottom	...	...	...	24"
Length of body	...	...	...	11"
Width of body under arm	...	...	...	8"
Sleeves, finished	...	...	...	10"

Weight, 1 lb. 3 Ply fingering.



Instruction XLIX.

Child's Polka Jacket.

In Cardigan, knit from fine fingering Yarns, rather soft tension.



BACK

Push up 45 needles each side.

Knit 250 rows and run work out.

FRONT

Push up 20 needles each side.

Raise 6 times at one edge of work.

Knit 4 rows between raisings.

Knit 185 rows after last raising.

Narrow 10 times on same edge as raisings.

Knit 4 rows between narrowings and run work out.

Shape one piece at right, the other at left of machine.

This will make
the corners at
front rounded.

SLEEVES

Push up 35 needles each side of machine.

Knit 24 rows.

Narrow 4 times each corner.

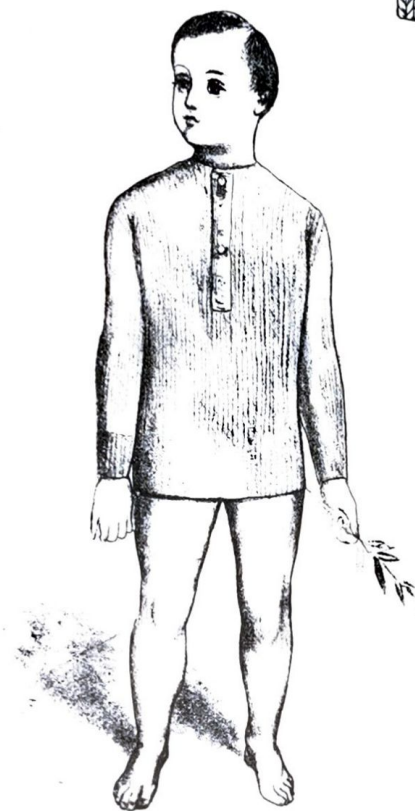
Knit 24 rows between.

Knit 50 rows after last narrowing.

Knit a trimming for round neck and cuffs, or finish with crotchet work.

Extreme length, 11"

Width, 10½"



Instruction L.

Little Girl's or Boy's Shirt.

(In ribs 1 and 1.) SIZE 1.

From same Yarns as Undervest

Push up 60 needles each side.

Knit 420 rows and run work out.

Cut out for neck, and backstitch down.

SLEEVES

Push up 60 needles each side.

Knit 4 rows.

Narrow 6 times.

Knit 4 rows between narrowings.

Knit 30 rows.

Narrow 5 times.

Knit 4 rows between narrowings.

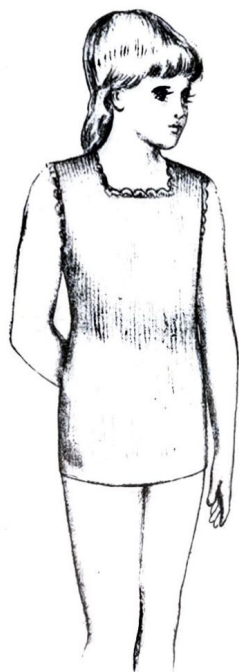
Knit 35 rows tight, and run work out.

Instruction LI.

Children's Undervests.

(In ribs 1 and 1.)

Square necks, knit from 3 Ply fingering, or fine Merino Yarns.
Tensions at about 10 stops as for ribs.



Size	1	2	3	4	5
Number of needles to push up on each side of machine...	40	45	50	55	60
Number of rows to knit up to neck... ..	220	270	320	370	420
Number of needles to throw off in centre of machine, each side	20	23	25	26	28
Number of rows to knit on each side for shoulder ...	30	30	40	45	50
Set up the needles in centre again, and knit ...	220	270	320	370	420
Length from top of shoulder...	12"	14"	16"	18"	20"
Width	7"	7 $\frac{3}{4}$ "	8 $\frac{1}{2}$ "	9 $\frac{3}{4}$ "	11 $\frac{1}{4}$ "

This table of measure will be found to be correct.
Make the fabric as near the size in inches as possible.



Instruction LII.

Gent's Waistcoat.

Knit from 4 Ply Andalusian Black, in Cardigan.
Tensions 1 and 2 at 10, 3 and 4 at F.

BACK PART

Push up 110 needles each side of machine.
Knit 400 rows.
Narrow three times at each corner.
Knit 1 row between each narrowing.
Knit 150 rows for arm-hole.
Narrow down to 50 stitches on each side.
Knit 4 rows between.

FRONT PART

Push up 65 needles.
Knit 80 rows.
Narrow 6 times on one side.
Knit 30 rows between narrowings.
Knit 190 rows after last narrowing.
Narrow 7 times on same side, for under arm.
Knit 2 rows between.
Narrow 5 times at same side.
Knit 10 rows between.
Knit 96 rows after last narrowing.
Narrow 7 times on the opposite side.
Knit 10 rows between.
Raise 3 times on arm-hole side, continuing to narrow each time until raisings are done.
Knit 10 rows between.
Knit 50 rows after last narrowing.
Make two pieces, one right the other left.

POCKET

Push up 38 needles.
Knit 160 rows, and run work out.



Instruction LIII.

Knee Caps.

Knit from Lambswool, 3 Ply.

Push up 65 needles each side of machine.

Knit 50 rows ribs 1 and 1, tensions about 10.

Knit 150 rows Cardigan, tensions about 13.

Knit 50 rows ribs 1 and 1, tensions as above, and run work out.

Seam up the edges.

Length of ribs when finished, $4\frac{3}{4}$ " each end.

Length of Cardigan... 6"

Extreme length ... 16"

ANOTHER KNEE CAP.

Knit from 4 Ply Andalusian.

Tensions 1 and 2 at 11. Tensions 3 and 4 at F. Cardigan stitch.

Push up 8 needles each side.

Knit 40 rows.

Raise 12 times at each corner.

Knit 4 rows between each raising.

Knit 40 rows after last raising, and

Narrow 12 times at each corner.

Knit 4 rows between narrowings, and

Knit 40 rows after last narrowing, and run work out.

Do another piece like this, and join them together.

This is a very serviceable knee cap.

Instruction LIV.

Child's Skirt.

Knit in Cardigan and Ribs, from fine super fingering Yarn, same as Ladies' Skirt.



Push up 120 needles each side of machine.

Arrange needles for ribs 2 and 2. Set up as per Instruction No. 1 for Ladies' Skirt.

Knit 200 rows.

Rack every 4 rows.

Change tensions for ribs 2 and 2.

Knit 80 rows.

Throw off 6 stitches at each corner.

Knit 60 rows for arm-hole, and run work out. Finish off round skirt bottom, neck, and arm-hole, with crotch work.

THE SKIRT MAY BE STRIPED:

Knit 30 rows self-colour.

Stripe 10 "

Knit 20 " self-colour.

Stripe 20 "

Knit 20 " self-colour.

Stripe 10 "

Knit 80 " self-colour.

Change tensions for ribs, and knit body as in plain skirt.

Navy and white, ladies' grey and royal blue, fawn and black and amber, make very nice striped skirts.

Instruction LVI.

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Children's Cravats.

Plain Knit off single Berlin wool. Knit at a loose tension.
Push up 60 needles each side of machine.
Arrange needles, every other needle in work, back and front.
Set tensions and stops for plain circular knitting.
Knit required length, and run work out.
Turn the fabric on to wrong side, sew up the end, and finish with a fringe at each end.

Instruction LVII.

Mittens.

In Cardigan stitch and ribbed cuff, knit from 4 Ply Super-fingering, counts 18's.
Push up 40 needles each side.
Knit 50 rows in ribs, 1 and 1.
Knit 100 rows Cardigan stitch.
Throw off 6 stitches at each corner for thumb.
Knit 30 rows.
Hook the 6 stitches in again, each edge separately, and knit 30 rows in each.
Extreme length, 9"
Width across hand, 4"

Instruction LVIII.

Fringes.

Fringes are obtained by pushing up a group of needles at each end of machine, and leaving a space between each group, then knitting across. The size of groups to be arranged according to the length of fringe required.

Instruction LIX.

Cuffs.

(In ribs 2 and 2, or fancy stitch Cardigan.)
Push up 52 needles each side, and arrange for ribs 2 and 2.
Knit 80 rows ribs 2 and 2, and run work out.

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Instruction LX.

Antimacassars.

Knit from single Berlin or fingering wools, rather loose. Arrange needles as per Instruction 2 for Fancy Stitches, making as many groups of needles as machine will allow. Set up work, and rack at each end of work 15 times. Crank will then be at right. Knit across from right to left without moving the rack handle, and so on until desired length is knit. Crotchet the strips together by hand, and fringe ends.

Instruction LXI.

Children's Hand Muffs.

From single Berlin wool, or 4-fold fingering.

Push up 82 needles each side. Arrange needles for ribs 2 and 2.
Move bed so that needles come opposite each other.
Set up and knit one plain round. Knit about 16" in length, moving bed every 4 rows.
Line with cotton wadding and silk, and sew up the ends.

Instruction LXII.

Gent's and Ladies' Scarves

May be knitted same as children's cravats, or by forming desired breadth from some of the fancy stitches, and knit loosely in Cardigan from fine fingering wools.

Instruction LXIII.

For Fancy Cardigan Stitch.

Set tensions 1 and 2 at 12, 3 and 4 at close.
Move bed so that needles come opposite each other.
Set work up, knit about 150 rows, rack every 4 rows, and run work out.



Instruction LXIV.

Child's Gaiter.

Cardigan Stitch. Tension about 12. Stops for ribs.
Off Single Berlin or Fingering Wools.

Push up 36 needles each side.
Rack 24 rows Leicester stitch.
Knit 30 rows plain Cardigan.
Rack 24 rows Leicester stitch.
Knit 100 rows plain Cardigan.
Rack 24 rows Leicester stitch.
Narrow 3 times each corner.
Knit 26 rows between.
Throw off 7 stitches at each corner.
Knit 50 rows, and narrow 6 times at each corner,
every time across to round the end.
Finish top back of heel and upper part of foot with
crotchet work. Sew up the back, and finish with foot strap.

Instruction LXV.

Counterpanes.

(In Cotton or Wools.)

Cotton about 16's. Wools 3 Ply Fingering.
Tensions 1 and 2 at 14; 3 and 4 close. Stops for Cardigan.

Push up all needles back and front of machine.
Back row, first three needles in work, then one
down to end.

Front row, first three needles in work, then one
down to end.

Set up work, and commence knitting.

Move rack handle every row nine times.

Crank will then be at right. Bring from right to
left without moving bed. Then rack again nine times each
row, until $3\frac{1}{2}$ yards have been knit. Run work out. Knit
as many pieces as will make a square. Crotchet them
together, and fringe all round. This arrangement, if
properly racked, will make a zig-zag pattern.

Instruction LXVI.

Hand-Bag.

Set up a piece of work in plain or fancy stitch.
Knit double required length, and run work out.

Run a piece of wool through the stitches at the end.
Fold the work, and seam up the edges. Line inside with
cotton or Turkey red. Crotchet round top, and work two
handles with crotchet-hook. Makes a beautiful Hand-bag.

K

Fancy Stitches.

Fancy Stitch, No. 1.

Arrange needles as for ribs 2 and 2.
Set up as for Cardigan, and rack every 4 rows.

Fancy Stitch, No. 2

Push up 140 needles on back row. Arrange the needles one up and one down, from right to left. Push up same number of needles on front row (first ascertaining that all is right for knitting Cardigan to rack). Commence to arrange the needles same as the back row, one up and one down, until there are 8 needles in work. Then pull two needles down out of work. Repeat this to the end of front row. Having 8 needles in work, one up and one down, every eighth needle in work, pulling two down. Set up the work. Knit required length. Rack every 4 rows. If needles are properly arranged, the work will be in stripes, one racked and one plain stripe alternately. This is a very light pattern for Skirts, Antimacassars, Counterpanes, &c., also Children's Princesses, Children's Skirts, &c.

Fancy Stitch, No. 3

Arrange needles one up and one down on back row.

Arrange needles three in work and one down on front row.

The centre needle in the groups on the front must rack with one of the needles on the back. Rack every 4 rows. This is rather a heavy pattern for Skirt.

Fancy Stitch, No. 4

Arrange all needles as for plain Cardigan. Set work up, and knit 9 rows, leaving crank to right.

On back row lift the second stitch on to the third needle, and bring the fourth stitch on to third needle. Lift the seventh stitch on to the eighth needle, and bring the ninth stitch on to the eighth needle: repeating to end of work. Open the latches of the vacant needles, and leave them in work. Knit 10 rows, and repeat same operation, being careful to move the same stitches every time. This stitch makes a fancy border for Boys' Suits.

Fancy Stitch for Kilted Suit, No. 5

Push up equal number of needles back and front rows.
Set for plain Cardigan stitch.

Arrange the needles on back row, 5 in work and 3 down. Have the needles in work opposite each other, to rack.

Arrange the needles on front row, 5 in work and 3 down.

Set up work, and rack every two rows.

Fancy Stitch, No. 6

Push up equal number of needles back and front rows.

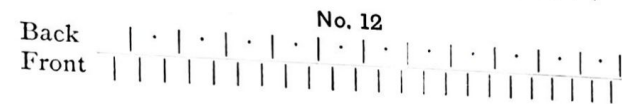
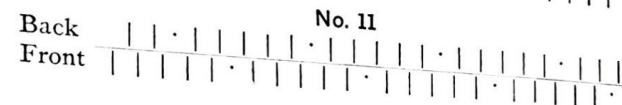
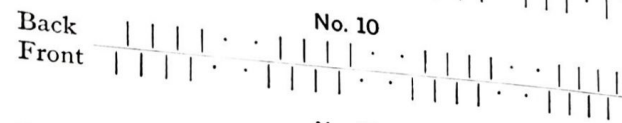
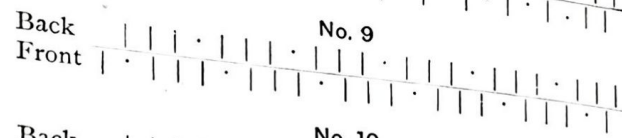
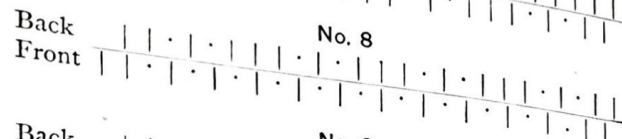
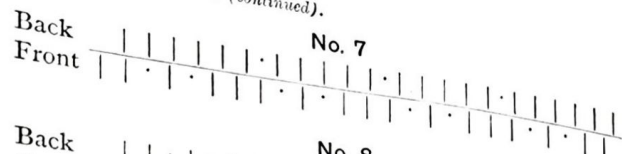
Set up for plain Cardigan stitch. Knit one plain row from left to right. Leave crank at right.

Arrange needles, back row, as follows:—Hook the sixth stitch on to the fifth needle, and the eighth stitch on to the ninth needle. Take the seventh stitch on to the opposite needle on front row. Pull down empty needles. There will then be 5 needles in work, and 3 down. Repeat this to the end. Have first front row needle in work; then one down; then 3 in work and 1 down: 3 in work and 1 down to end of row.

Turn crank to left, and finish plain round. Commence knitting, and rack every 4 rows.

Instruction LXVII. (continued).

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As there is no limit to the number of fancy stitches that can be produced by the "SELLERS' IMPROVED MACHINE," the foregoing are given as suggestions to enable the operator to determine the simplicity of producing fancy work. Any pattern may be made by the same method of arranging the needles and the use of the rack handle. Our large machines will rack over one, two, or three needles, which is a great advantage to the operator in making fancy work.



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Instruction LXVIII.

How to make a Glove; FULL-SIZE WOMAN'S

Knit from 4 Ply Super Fingering counts 18's.
Tensions 1 and 2 at 12; 3 and 4 at 5, for Plain Knit.

Push up 33 needles on back row.

Push up 32 needles on front row.

Set tensions 1 and 2 at 15, and 3 and 4 at 5.

Set up as for plain knit, and knit one plain round, but before coming to extreme left push in left-hand front stop, and finish round.

Set tensions 1, 2, and 3, at 10 or 11.

Pull in right-hand back stop.

Turn crank to right.

Set tension 4 at same number as 1, 2 and 3.

Knit 75 half-rounds across top of machine.

Run work out, leaving crank at right.

Commence to hook in the work at left of machine, on the back row of needles.

Hook the stitches round, as for a plain stocking.

Set tensions 1 and 2 at 12.

Set tensions 3 and 4 at 5.

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Instruction LXVIII. *(continued).*

Push out right-hand back and left-hand front stops.
Knit 24 rounds, and leave crank at left.

Raise 10 times at right of machine.
Knit 2 rounds between.

All the extra needles raised must be advanced one needle forward each time, so that the raising-stitch is made all on one needle.

Knit 2 rounds after last raising.

Take a piece of thread of another shade, and knit 8 stitches back and front on to it, at same corner as raisings have been made, and drop them down between beds.

Knit 30 rounds.

Take a piece of thread of another shade, and knit 25 stitches on to it, from back and front rows, leaving 9 stitches on each row at left of machine.

Fourth Finger

9 stitches are left on each row.

Knit 30 rounds.

Break the yarn, and thread-up the stitches in the same manner as taking off a stocking toe.

Third Finger

Push up 10 needles at each side of machine.

Take 8 stitches next to the finger made; commence to hook them on at third needle, leaving first two vacant at left. Hook them on to front row in same manner.

Take the first two loops from the bottom of the fourth finger at front side, and hook them on to the two vacant needles on front row.

Take the first two loops from the bottom of the fourth finger at back, and hook them on to the two vacant needles on back row.

Knit 38 rounds, and thread the stitches up as in fourth finger.

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Instruction LXVIII. *(continued).*

Second Finger

Push up 11 needles at each side of machine.

Hook 9 stitches on, back and front, leaving 2 vacant needles at left each side, as in third finger; placing the loops from third finger on to empty needles as before.

Knit 41 rounds, and finish off as before.

First Finger

Push up 10 needles on each side of machine.

Hook the 16 remaining stitches on, and fill the two vacant needles as before.

Knit 38 rounds, and finish off.

Thumb

Push up 10 needles on each side of machine.

Hook on the 16 stitches thrown off, leaving the vacant needles next to the hand.

Take two loops from front and back of hand to fill up the vacant needles.

Knit 30 rounds, and finish off.

Plain knit Mittens may be made from the same Instruction, leaving off the fingers, and selvedging the top of hand. Finish off with crotchet work.





Instruction LXIX.

Gent's Socks.

(In Cardigan fancy stitch.)

Knit from 4 Ply Super-fingering.

Tensions 1 and 2 at 11, 3 and 4 at F. Stops as for ribs. Tensions 1, 2, 3 and 4 at 9, as for ribs.

Push up 60 needles each side of machine.
Arrange the needles as for ribs 2 and 2.

Instruction LXIX. (continued).

Move the bed to bring the groups on each row opposite each other.

Set up work, knit a plain round, and move bed back.

All tensions at 9.

Knit 30 rows of ribs 2 and 2.

Alter tensions 3 and 4 to F.

Alter tensions 1 and 2 to 11. Stops as before.

Knit 30 rows Cardigan.

Rack every 4 rows.

Narrow at each corner 3 times.

Knit 20 rows between narrowings.

Knit 100 rows after last narrowing.

Rack every 4 rows.

Take a piece of wool of another shade and knit on to it a quarter of the stitches at each corner, right and left.

Push up needles until loops are below latches. Draw down the needles again and let stitches drop between beds of machine, and withdraw the empty needles.

Knit 120 rows for upper part of foot.

Rack every 4 rows, and run work out.

Take the two edges of work and put them together.

Push up 36 needles on back row of machine, and hook work in.

Set tensions and stops as for heel in plain stocking.

Knit 28 rows. Take heel off as in plain stocking.

Narrow the gore with the apparatus with 3 eyelets in.

Knit 60 rows, counting the narrowings of the gore.

Hook in the stitches for upper part of foot on front row.

Set tensions and stops as for plain knit.

Knit 20 rounds and narrow toe out.

SIZE.

Length of leg to bottom of heel	...	12".
Length of foot from back of heel	..	10½".

Instruction LXX.

Gent's Fancy Ribbed Stocking.

(In Cardigan stitch.)

This stitch is shewn to best advantage in self-colours.

Knit from 4 Ply super-German, or Scotch fingering 3 Ply Yarn.
Tensions 1 and 2 at 11, 3 and 4 at *F*. Stops as for ribs. 1, 2, 3, and 4, at 9 for ribs.

Push up 70 needles each side of machine.

Arrange needles as for ribs 2 and 2.

Move the bed to bring the groups of needles opposite each other.

Set up work. Knit 1 plain round, and move bed back.

All tensions at 9. Right-hand back and left-hand front stops in.

Knit 50 rows of ribs 2 and 2 for welt.

Alter tensions 3 and 4 to *F*.

Alter tensions 1 and 2 to 11. Stops as for ribs.

Knit 240 rows for leg. Rack every 4 rows.

Narrow 8 times at each corner with 2 apparatus.

Knit 20 rows between. Rack every 4 rows.

Knit 100 rows for ankle after last narrowing.

Rack every 4 rows.

Instruction LXX. (continued).

Take a piece of wool and knit a quarter of the stitches on to it back and front, at left of machine. Push the needles up until stitches are below latches. Pull needles down, and let stitches drop between beds of machine. Pull down empty needles. Turn crank to left and repeat same at right of machine.

Knit 70 rows for upper part of foot. Rack every 4 rows and run work out.

Push up 36 needles at back of machine.

Set tensions and stops as for heel in plain stocking.

Take the two edges of work, put them together, and commence by putting the end stitches on to centre needle.

Knit 28 rows for heel, and take off as in plain stocking.

Narrow the gore with the apparatus with 3 eyelets in.

Knit 70 rows for under part of foot.

Hook in the upper part of foot. Knit 20 rounds, and narrow toe out.

Length to bottom of heel ... 24".

Length of foot from back of heel ... 11½"



SIZE-LIST for STOCKINGS and SOCKS.

AGE.	No. of Needles up on each side.	No. of rounds for welt.	No. of rounds for the leg.	No. of times to narrow.	No. of rounds between each narrowing.	No. of rounds for the ankles.	No. of half-rounds for the heel.	No. of stitches on wires.	No. of rounds for the foot.
1	22	24	30	—	—	—	18	6	40
3	24	25	50	—	—	—	20	6	50
5	30	25	50	6	4	25	20	6	45
6	32	25	55	6	4	30	20	7	50
8	34	25	55	7	5	35	20	7	55
10	38	26	65	8	6	45	22	7	60
14	41	27	70	8	6	50	26	8	65
Small Women's.	42	27	85	8	6	55	26	8	70
Women's ...	45	28	90	10	6	55	28	9	75
Men's ...	48	30	100	9	7	60	28	9	85

SIZES for GENT'S and YOUTH'S SOCKS.

Large	41	50	45	4	5	—	28	9	90
Small	37	50	40	4	5	—	26	8	75 to 80

The above Tables are calculated from a super German Yarn, 4 fold, 14's counts. First two sizes of Socks are in 3 ply, same counts, knit on a Class 2 Machine; tensions at 12.

Gent's and Youth's Socks are knit from Alloa super fingering, 4 fold, on Class 2 Machine.

IRREGULARITIES IN THE WORK.

BREAKING OF THE YARN.

When the yarn is unevenly wound, and the coils get firmly embedded under each other, and do not come off freely; or when the yarn is uneven and slubby, or the tension too high; when yarn is too thick for the machine.

HOLES IN THE WORK.

Holes in the work are caused by the knives being rough through striking the needles, or the needle latch having become deranged; when the weight is too light, that the stitches rise with the needles, and the work cut by the knife; the weight being too heavy, or the knitting too loose; when the yarn guide is set too low and rubs on the needles.

WHEN THE WORK WILL NOT DESCEND.

When the work will not descend, it is caused by insufficient weight, tensions being too tight, or deranged latches; the yarn having caught round the jack, and will not let the knitting go.

DROPPED STITCHES.

Dropped stitches are caused by the knives being too high; the yarn guide too high, or not working central between both rows of needles, or the needle hubs being broken off.

STITCHES DROPPED AT CORNERS.

When the yarn guide is too high or too low; tension too light or too strong on take-up spring.

WHEN A ROW OF NEEDLES WILL NOT TAKE THE YARN.

This is caused by the hole in the yarn-guide being worn too large, the yarn guide being too high, or the knives set too high.

SLACK STITCHES AT CORNERS OF WORK.

When the tension wire is too weak or too strong; when one side of the work is tighter than the other. It is also caused by the tensions not being set at the same number.

NEEDLES BREAKING.

When needles break, it is caused by their being too thick for the grooves, or crooked, and will not move freely up and down the grooves, and thus come in contact with the knives or cams.

TO PUT IN NEW NEEDLES.

Nothing is saved by keeping needles in the machine with broken heels or crooked latches. If allowed to remain in the machine, they will damage the locks and work, and cause much annoyance to the operator.

Have crank at right. Take the gib-hook and insert it in the end of needle-gibs, which draw out. Take out the broken needle, and place a new one in the same groove. Be careful to know that the needle will work free before leaving it. Then replace the gibs, and continue working.



PRICE LIST

OF

Sellers' Knitting-Machine Parts

FOR CLASSES 1 AND 2.

	£	s.	d.		£	s.	d.
1 Needle Plate...	...	2	14	0	26 Connecting Rod		
2 Carriage ...	...	1	16	0	Link Washer Screw }	0	0
3 Base ...	...	0	7	6	27 Carriage Rail	...	0
4 Bed Rest ...	...	0	15	0	28 Needle Gib ...	...	0
5 Long Crank ...	...	0	4	0	30 Tension Indicator		
6 Short „	...	0	3	6	Plate ... }	0	1
7 Handle ...	...	0	0	6	31 Tension Pointer	...	0
8 „ Stud ...	...	0	1	0	32 Brass Thumb Screw	0	1
9 Crank Shaft ...	...	0	1	0	33 Knife or Latch Opener	0	1
10 Worm ...	...	0	3	6	34 Yarn Carrier Block	...	0
11 Counterplate...	...	0	5	0	35 „ „ Key	0	1
12 „ Finger...	...	0	0	6	36 „ „ Spring	0	0
13 Counter Pillar	...	0	0	6	37 Yarn Carrier...	...	0
14 Pillar Screw ...	...	0	0	2	38 „ Guide ...	...	0
15 Washer for ditto	...	0	0	1	39 Tension Bridge	...	0
16 Lock Stop ...	...	0	1	0	40 V Guide ...	...	0
17 „ „ Stud	...	0	0	6	41 Tension Spring	..	0
18 Large „ Screw	...	0	0	3	42 „ „ Stud...	0	0
19 Small „ „	...	0	0	2	43 Receding Jack Lever	0	2
20 Lock Stop Screw					44 Centre Stud for ditto	0	0
Washer ... }	0	0	1		45 Spiral Spring „	0	0
21 Lock Stop Runner					46 Cam Plate ...	...	0
Stud ... }	0	0	6		47 Wing Cam ...	...	0
22 Connecting Rod Link	0	1	6		48 Centre or V Cam		
23 „ „	0	2	0		and Studs }	0	5
24 „ „ Nut	0	0	4		49 Wing Cam Stud	...	0
25 „ „ Washer	0	0	1		50 „ „ Screw	...	0

KNITTING-MACHINE PARTS (*Continued*).

	£	s.	d.		£	s.	d.
51 Back Lock ...	0	5	0	74 Winder Wheel Handle } Stud }	0	0	6
52 " " Large Washer }	0	0	1	75 " " Handle	0	0	6
53 " " Small do.	0	0	1	76 Winder Bracket ...	0	1	0
54 " " Tension do.	0	0	1	77 " Spindle ...	0	1	0
55 Lock Spring ...	0	0	3	78 " " Wharl	0	0	6
56 Steadying Rod ...	0	5	0	79 " Thumb Screw	0	0	6
57 " " Nut ...	0	0	6	80 Swift Bracket ...	0	1	6
58 Racking Lever ...	0	3	0	81 " " Screw ...	0	0	6
59 " Motion Stud	0	0	9	82 Swift (Shaker) ...	0	7	6
60 " " " Nut }	0	0	4	83 Set-up Comb ...	0	2	6
61 " " Spring	0	0	6	84 Hook " ...	0	1	6
62 " " Slot Plate }	0	2	6	85 Transfer " ...	0	2	0
63 " " Short Plate }	0	0	4	86 Buckle ...	0	1	0
64 Tension Bridge Screw	0	0	2	87 Triangle ...	0	0	6
65 Back Lock Runner } Stud ... }	0	1	0	88 Narrowing Apparatus	0	1	6
66 Centre Cam Large Stud	0	1	0	89 Heel Hook ...	0	0	6
67 " " Small "	0	1	0	90 Work Hook ...	0	0	6
68 Yarn Stand Bottom } Plate }	0	2	0	91 Needle Rest ...	0	0	3
69 " " Rod ...	0	1	0	92 Needles (per dozen)	0	1	0
70 " " Top Wing	0	1	6	93 Needle Gib Hook ...	0	0	8
71 " " Bobbin Peg	0	0	2	94 Weight Bearer ...	0	1	0
72 Winder Wheel ...	0	1	0	95 Eyelets (per dozen)	0	1	0
73 " " Stud ...	0	6	0	96 Needle Rest Cover } Plate ... }	0	1	6
				97 Weights (each)	0	0	6
				98 Yarn Spools ...	0	0	4

W. SELLERS AND SONS,

AIREDALE WORKS,

KEIGHLEY.